



# Commonwealth of Massachusetts

Mobilization for Federal Economic Recovery Infrastructure  
Investments – Task Force Reports

February 2009

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## I. Executive Summary

On behalf of the more than 275 people who participated on our Task Forces, we are pleased to publish this compilation of our work to mobilize the Commonwealth to make hundreds of millions of dollars of infrastructure investments with funding expected to be made available through the anticipated federal economic recovery legislation (the “Federal Act”). In addition to identifying thousands of “shovel-ready” infrastructure projects across the Commonwealth, this report contains many recommendations for actions that can and should be taken to ensure the prompt and effective delivery of projects funded under the Federal Act. Thanks to the valuable and productive work of the Task Forces reflected in this report, the Commonwealth will not only be better prepared to take advantage of the opportunity presented now by the infrastructure funding provided under the Federal Act, but also to more thoughtfully and effectively use its own resources to make capital investments in the years to come.

Although the work of the Task Forces is a significant first step toward mobilizing the Commonwealth to promptly and effectively invest infrastructure funding made available under the Federal Act, it is only that – a first step. As the Task Force reports indicate, there are many next steps that the Commonwealth needs to take to fully prepare for the federal funding. Many of those next steps are already being taken, and this report will serve as a valuable guide in our continued mobilization effort and in the implementation of projects ultimately funded under the Federal Act.

As described in more detail below, it is particularly important that readers of this report understand that the lists of potentially eligible projects included in this report are a work in progress. The lists have been separated into two categories: (1) a list that includes all projects that state agencies represented on the Task Forces have preliminarily determined to be “shovel-ready” based on their evaluation of project readiness, and (2) an unreviewed list that includes all projects submitted to Task Forces that have not yet been independently evaluated by state agencies to confirm that they are “shovel-ready.” These lists will be pared down further following additional project readiness evaluations. Moreover, all indications are that the Federal Act will significantly limit the potential for projects listed in this report to receive federal funding by restricting the funding to a more limited scope of projects and by limiting the amount of funding available for such eligible projects. ***As a result, most of the projects on the lists included in this report will not ultimately receive funding under the Federal Act.***

### Establishment of Task Forces and Mission

About six weeks ago, Governor Patrick asked us to establish task forces to begin the work of mobilizing the Commonwealth for the potential receipt of hundreds of millions of dollars from the federal government for “shovel-ready” infrastructure projects. At that time, then President-elect Obama and members of Congress were formulating a federal economic recovery bill that, among other funding initiatives to stimulate the economy, was likely to include significant funding for infrastructure projects. It was also clear at that time that the incoming Obama Administration and Congress were intent on targeting the infrastructure funding to projects that could commence quickly to create jobs in the near term and that, if states did not use the funding quickly, the funding would be reallocated to other states.

The Governor recognized that the prospect of receiving hundreds of millions of dollars of federal funding for infrastructure projects presented the Commonwealth with an historic opportunity – an opportunity that the Commonwealth could not afford to lose. In addition to creating thousands of desperately needed jobs throughout the Commonwealth, the federal funding will allow the Commonwealth to lay the foundation for long-term economic strength by investing in energy efficiency and clean energy, better schools and college facilities, improved roads, bridges and rail service, a more efficient and cost-effective health care records management system, broadband expansion and more. Taken together with the increased capital investments we are making pursuant

to the state's capital budget, the federal infrastructure funding will help to revive our economy today and rebuild Massachusetts for tomorrow.

The Governor also recognized that seizing this historic opportunity presents an enormous challenge for the Commonwealth. It will be a challenge to build the capacity to deliver hundreds of millions of dollars of infrastructure projects in addition to the projects already planned and being funded from state and local resources. This capacity challenge exists for both the public agencies that will administer the projects and for the private sector contractors and workforce that will deliver the projects. It will also be a challenge to overcome the typical obstacles to speedy project delivery to ensure compliance with the deadlines in the federal legislation, while also preserving the protections built into the project delivery process necessary to ensure taxpayer funds are being spent wisely.

To meet these challenges and to seize this historic opportunity, the Governor charged us with creating the following Project Delivery Task Forces to focus on specific types of infrastructure investments:

- a) Energy
- b) Education Facilities
- c) Transportation
- d) Information Technology (including electronic medical records)
- e) Private Development (including broadband expansion)
- f) State Facilities and Courts
- g) Municipal Facilities

The Governor directed that each of these Project Delivery Task Forces develop work plans for prompt and effective delivery of projects that could be funded under the Federal Act. Specifically, he asked that these work plans include at least: (i) a statement of overall objectives; (ii) a list of "shovel-ready" projects, including project description, location, cost, schedule and agency or entity responsible; (iii) staffing plans for public agencies that would implement the projects; (iv) any gaps or barriers to meeting the objectives and plans for addressing them; and (v) metrics by which to measure success in meeting the objectives.

The Governor also charged us with establishing the following three additional Task Forces to support the work of the Project Delivery Task Forces in developing plans for addressing common obstacles to project implementation:

- **Workforce** – This Task Force was charged with developing plans to mobilize both the state and the private workforce, including strategies to accelerate hiring and ensure inclusion of underrepresented communities.
- **Permitting** – This Task Force was charged with assisting with efforts to speed up state and local permitting processes for ready-to-go projects identified in the work plans.
- **Procurement** – This Task Force was charged with assisting with ways to simplify and speed up the procurement and contracting processes consistent with transparency, accountability, and a fair opportunity for small businesses, including M/WBEs, to participate.

Finally, the Governor directed that the work of our Task Forces to mobilize the Commonwealth to make these infrastructure investments be consistent with the following Guiding Principles:

- a. **Invest for the Long Term.** All projects under this program should have a long-term benefit, in addition to the stimulus effect of putting people back to work now.
- b. **Limit Impact on Operating Budgets.** Prefer investments that will reduce – or at least not add to – demands on the operating budget.

- c. **Follow Established Infrastructure Priorities.** Make choices based on the infrastructure priorities recently approved by the Development Cabinet. See *Appendix 1 – Development Cabinet Infrastructure Priorities* for a listing of these priorities.
- d. **Diversify.** Subject to whatever constraints there may be in the Federal Act, identify projects for funding in a manner that ensures funds will be allocated across a variety of industries and geographic locations.
- e. **Buy Massachusetts.** To the extent possible, contract with Massachusetts contractors, purchase goods and services from Massachusetts companies, and hire Massachusetts people.

## Approach of Task Forces in Developing Reports

Pursuant to Governor Patrick's direction, we established the Task Forces in late December. Each Task Force was composed of a broad representation of public officials and private sector stakeholders to ensure that its work benefited from a wide range of relevant perspectives and expertise. In order to avoid potential conflicts of interest, however, no representatives of private sector companies that might ultimately bid for work on projects funded under the Federal Act were permitted to participate as members of any Task Force. Each Task Force met regularly through the end of January and Task Force members invested a significant amount of time and resources during that period to contribute to the work of the Task Forces. Each of the Task Force reports that follows identifies the members of the Task Force and the process it followed in carrying out its mission.

Although the mission and subject matter of each Task Force was different, there are certain assumptions underlying the work of each Task Force, and approaches taken by each Task Force, that were common among them. A brief description of these underlying assumptions and approaches is set forth below.

Project Readiness Eligibility Standard. When the work of the Task Forces commenced, a draft of the Federal Act was not yet publicly available. Although a "use it or lose it" provision was expected to be included in the Federal Act, it was not known with certainty what the Federal Act would require with respect to the time within which projects funded under the Federal Act must commence.

To be conservative, all Project Delivery Task Forces limited their development of lists of "shovel-ready" projects to projects that could actually start work within 180 days from the end of January. This eligibility standard does not include projects that could start only the design phase within 180 days; rather, the commencement of construction or comparable work has to be achievable within 180 days.

The lists of projects developed by the Project Delivery Task Forces fall into two general categories and are presented separately in this report: (1) projects that state agencies have preliminarily determined meet the 180-day readiness eligibility standard after conducting a diligent evaluation of project readiness and otherwise further objectives developed by the related Task Force (see Table 1), and (2) projects that municipalities or third parties have submitted to the relevant Task Forces for consideration that have not yet been independently evaluated by state agencies with respect to project readiness or furtherance of the related Task Force's recommended objectives (see Table 2). The use of these two separate lists is intended to reflect the different stages in the evaluation process and where any particular project is in that process. With respect to those projects on the first list, state agencies have taken the following factors into account in assessing project readiness: design requirements, permitting requirements, site or right-of-way acquisition requirements, procurement requirements, and other requirements that need to be satisfied before starting a project that could prevent or delay the commencement of a project.

**Table 1 – State-Reviewed, “Shovel-Ready” Project List**

Task Force	Project Count	Total Federal Act Request (\$) *
Education Facilities	698	\$2,219,854,900
Energy	258	\$1,159,289,990
IT	198	\$1,488,428,988
Private Development (reviewed)	194	\$1,356,009,670
State Facilities	1,665	\$1,426,069,815
Transportation	237	\$1,939,713,799
<b>TOTAL</b>	<b>3,250</b>	<b>\$9,589,367,163</b>

\* Excludes identified duplicates

**Table 2 – Unreviewed List of Projects Submitted for State Consideration**

Task Force	Project Count	Total Federal Act Request (\$) *
Municipal	4,641	\$16,484,058,622
Private Development (additional submissions)	220	\$1,841,024,117
<b>TOTAL</b>	<b>4,861</b>	<b>\$18,325,082,739</b>

\* Excludes identified duplicates

Within the last two to three weeks and after the work of the Task Forces was well underway, different versions of the Federal Act emerged from Congress as it began its deliberations with respect to the legislation. Although the “use it or lose it” provisions in the bills are different among different versions of the bill and among different infrastructure programs within the bills, the 180-day project readiness eligibility threshold we used to identify “shovel-ready” projects generally appears to be a conservative readiness standard for satisfying the various “use it or lose it” provisions in the bills. The identification of extensive lists of “shovel-ready” projects using this conservative standard consequently positions Massachusetts well for meeting the federal time requirements and for possibly capitalizing on funds that could be reallocated from other states that are unable to meet the time requirements.

Supplement Planned Projects. The primary purpose of the infrastructure funding provided by the Federal Act is to stimulate the economy and create jobs. In order to maximize the economic impact of infrastructure investments made under the Federal Act, the Project Delivery Task Forces assumed that the federally-funded projects would supplement – not supplant – projects currently planned to be funded from state or local resources. Specifically, Project Delivery Task Forces generally did not include any state-reviewed projects expected to commence in the current fiscal year for which funding is provided pursuant to the capital investment plan of the related public agency. This ensures that any projects funded under the Federal Act would be done in addition to capital projects expected to start in the near term for which funding is already committed.

To the extent permitted under the Federal Act, we do recommend, however, that the Commonwealth explore the potential for funding any planned capital projects in the current fiscal year with funding under the Federal Act for the purpose of freeing investment capacity in the capital budgets of public

agencies to invest in other priority capital projects that are not eligible for funding under the Federal Act and that are not otherwise funded in the public agency's capital budget.

Allocation of Federal Infrastructure Funds. As indicated above, the work of the Task Forces commenced before any draft of the Federal Act existed. In order to ensure that the Commonwealth is prepared to capitalize on the Federal Act regardless of how it provides for the disbursement and allocation of funding for infrastructure projects, the Governor structured the state's mobilization effort to develop lists of a wide range of "shovel-ready" projects and to develop plans for promptly and wisely investing in that broad range of projects. Specifically, the Governor established certain Project Delivery Task Forces in anticipation of certain areas of targeted investment being included in the Federal Act – i.e., energy efficiency and renewable energy; transportation; schools; medical information technology; and broadband expansion – and he established certain "catch-all" Project Delivery Task Forces in the event that the Federal Act allocates federal infrastructure funding more broadly or provides the Commonwealth with discretion as to how to allocate such funding among "shovel-ready" projects – i.e., state facilities and courts; and municipal infrastructure.

Versions of the Federal Act that have recently emerged in Congress indicate that federal infrastructure funding is likely to be targeted to particular types of infrastructure investments. The amounts ultimately available for certain types of infrastructure investments, and the manner in which such funds will be distributed, will not be known with certainty, however, until a final version of the Federal Act is enacted.

Job Estimates. The primary objective of the federal infrastructure funding to be provided under the Federal Act is to create jobs. Consequently, the number of jobs created by any "shovel-ready" project identified by the Project Delivery Task Forces will be an important measure of success in meeting this objective, and, if the Commonwealth or any federal agency is granted discretion in allocating any portion of the federal infrastructure funding among eligible projects, the expected number of jobs to be created by a project will be an important factor in determining whether or not the project receives funding.

Estimating job creation that will result from capital projects is not an exact science, and there are a number of different methods for developing such estimates. For purposes of evaluating the job creation potential of any project, we are using the following methodologies for estimating the number of direct jobs (not induced jobs) that would be created for the following different types of projects:

- 14 jobs per \$1 million of horizontal construction (e.g., roads, water and sewer)<sup>1</sup>
- 9 jobs per \$1 million of vertical construction (e.g., buildings)<sup>1</sup>

The approach to estimating anticipated jobs created as a result of the Information Technology projects began with a data request from the Chief Information Officer of the Commonwealth to each Secretariat to compile project details. Each Secretariat included an estimate of both state/entity staff, as well as anticipated external contracted resources required for each IT project. As an additional validation step and to complement the self-reported jobs estimates by project, the Task Force performed an analysis of total jobs created by utilizing the Secretariat-reported percentage of each project budget associated with labor, as well as an average industry standard hourly rate, and estimated hours per FTE per year to determine a calculated jobs estimate. A comparison of the self-reported internal and external jobs estimate, with the calculated jobs estimate, yielded a delta of +/- 5%, and general consensus from the Task Force that the self-report jobs estimates were sound.

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<sup>1</sup> Job estimates are based on the horizontal and vertical construction composite data developed by the Task Forces and industry references such as the Federal Highway Administration and the Association of General Contractors. The Municipal Task Force used a blended rate (11.5 jobs per \$1 million) of the horizontal and vertical job creation estimates. This is due to the diverse nature of the projects submitted and varying level of detail in the submissions; there was not a way to consistently label each municipal project as either vertical or horizontal.



While the job estimates developed from these methodologies are considered to be conservative, there is no certainty about, and no assurance can be given about, the number of jobs that will actually be created as a result of any of the projects identified in the Project Delivery Task Force reports.

## Recommended Next Steps

Each of the Task Force reports included in this compilation contains a number of recommended action items to mobilize the Commonwealth to promptly and wisely invest the anticipated federal infrastructure funding to create jobs and to lay the foundation for long-term economic growth in Massachusetts. In addition to following those recommendations, we recommend that the following steps be taken to ensure the success of the Commonwealth's implementation of the federal economic recovery infrastructure program.

Appoint a Federal Economic Recovery Project Director. We recommend that the Governor appoint a Project Director to oversee the Commonwealth's implementation of the federal economic recovery infrastructure program. The Project Director should be charged with coordinating, monitoring and assisting state agencies and municipalities in the implementation of projects consistent with the Federal Act and the recommendations of the Task Forces. The Project Director should also serve as the central interface with the federal government and the public regarding the federal infrastructure initiative, and he or she should take responsibility for ensuring compliance with federal requirements and meeting expectations for transparency and accountability. Appointing a Project Director to play this role makes particular sense in light of the significant reporting and accountability provisions in the versions of the Federal Act being considered in Congress and the decentralized approach to distributing infrastructure funding to state agencies and municipalities contemplated by the Federal Act.

The Project Director should be hired, and the office of the Project Director established, as soon as possible. The federal legislation could be enacted as early as mid-February. There are many action-items being recommended by the Task Forces and there are many organizational systems that the Project Director needs to establish.

Transparency and Accountability. The Commonwealth will likely be receiving hundreds of millions of dollars to invest in infrastructure projects in a very short period of time. This is an historic opportunity for the Commonwealth to make a measurable and positive impact on our economy and on our future. It also presents enormous challenges for the Commonwealth, including the risk of mismanagement and waste inherent in the amount of federal funding anticipated the decentralized approach to spending the federal funds and the pressure to spend the funds quickly.

We must rise to this challenge and take advantage of the opportunity presented by the federal economic recovery infrastructure program to regain public trust in government management of major capital investment projects. Through this program, we can – and we must – demonstrate that the Commonwealth can manage the federal funds responsibly and invest the funds wisely to serve the best interests of the Commonwealth.

In order to ensure that the officials throughout government who will be implementing this program meet this challenge, we recommend that the Commonwealth establish and impose requirements for an unprecedented level of transparency and accountability. Based on versions of the Federal Act currently being considered in Congress, it appears that the Federal Act will also be imposing new requirements to provide for increased transparency and accountability.

At a minimum, we recommend that the following steps be taken to achieve this unprecedented level of transparency and accountability.

- **Central State Website** – Establish a central website similar to that proposed at the federal level that would not only include all of the information about projects funded under the

Federal Act that the central federal website will include, but also: notice of any procurement for projects being funded under the Federal Act; a copy of each contract entered into by an agency with federal infrastructure funding; actual performance in implementing projects compared to original project budgets and schedules; reporting on metrics for measuring success of federally-funded investment programs recommended by the Task Forces; and all other information regarding the state's implementation of the program that should be available for public review. This central website should serve as the primary communication and reporting tool for the Commonwealth's implementation of the federal economic recovery infrastructure program.

- **Independent Auditing and Enforcement** – It is critical that the Inspector General and State Auditor have the resources to proactively audit contracts funded under the Federal Act and the general management of the federal funds, and that the Attorney General's office have the resources to promptly and effectively pursue any claims of fraud or abuse. Support for the strong independent watchdog and enforcement roles that these offices play will be necessary to give the public confidence that public agencies will invest and manage the federal funds wisely.

File Legislation Needed to Implement Recommendations. Certain of the recommendations we have made in this introductory statement and many of the recommendations made in the various Task Force reports require legislative authorization. Legislative language to provide such recommended authorizations is in the process of being drafted. This state legislation may also need to respond to and be informed by the provisions in the final, enacted version of the Federal Act. Consequently, we recommend that state legislation necessary to effectively implement the federal infrastructure program be filed immediately upon passage of the Federal Act and that the Governor seek prompt passage by the Legislature.

Continue to Refine Project Lists. State agencies should continue to evaluate the projects included in this report for readiness and for furtherance of the capital investment objectives developed by the Task Forces. In addition, state agencies will need to evaluate projects for compliance with the readiness requirements for eligibility within the specific funding programs ultimately included in the Federal Act. As this evaluation process progresses, we anticipate that many of the projects listed in this report will be deemed ineligible for funding under the Federal Act and that the amount of federal funding ultimately available to fund capital projects in Massachusetts – while significant – will only be sufficient to fund a small portion of the projects identified in this report.

## Model of Civic Engagement

The Task Forces proved to be a model of civic engagement. A broad range of stakeholders and experts were actively engaged in the process of determining how to mobilize the Commonwealth for this extraordinary opportunity, and the value of their input and participation is reflected in this report. Each and every member of the Task Forces came ready to answer the Governor's call to mobilize the Commonwealth with a spirit of collaboration, hard work and commitment to positioning the Commonwealth to effectively take advantage of the opportunity presented by the federal economic recovery infrastructure funding. It was an invigorating, informative and valuable process for all of us, and we believe the members of the Task Forces appreciated the opportunity to participate in and contribute to this important mobilization initiative. We expect to reconvene the Task Forces in the future to seek their guidance as we move into implementation of the federal infrastructure program.

Respectfully submitted,

TASK FORCE CHAIRS

Lieutenant Governor Timothy Murray – Municipal Infrastructure  
Secretary Ian Bowles – Energy  
Secretary Suzanne Bump – Workforce Development  
Secretary Dan O’Connell – Private Development  
Secretary Paul Reville – Education  
Undersecretary Greg Bialecki – Permitting  
Undersecretary Jay Gonzalez – Procurement  
Undersecretary Jay Gonzalez – State Facilities and Courts  
Undersecretary Jeff Mullan – Transportation  
CIO Anne Margulies – Information Technology

## II. Task Force Overview—Project Delivery Task Forces

### Education Facilities Task Force

#### 1. Introduction

The Education Facilities Task Force was charged with ensuring that the public education sector in Massachusetts is ready to act with a coordinated and effective response to the anticipated American Recovery and Reinvestment Act of 2009 (the Federal Act) for investment in public education capital projects. To this end, Task Force members submitted an extensive list of projects that are or can be ready to begin work within the 180day “shovel-ready” timeline. The lists submitted include a project description, information regarding project readiness, estimated costs, estimated number of employees (with associated occupational data) and an estimated completion date.

The Task Force consisted of representatives from the relevant constituencies in public education, including: municipalities; teachers’ unions; the Division of Capital Asset Management (DCAM); the Department of Early Education and Care, the Department of Elementary and Secondary Education and the Department Higher Education; the University of Massachusetts and the state and community colleges; and the building authorities for K-12, the state colleges and the University of Massachusetts.

The Task Force represents three areas of education: early education, K-12 and higher education. The objective of the task force was: (1) to compile a set of proposed projects across the education sector that are or can be “shovel-ready” within 180 days and which projects may therefore be eligible for capital funding to the extent such funding becomes available in the Federal Act bill; (2) to compile a set of prioritization criteria for the division of any available funding within each sector of public education; and (3) to include any recommendations for the federal legislation so that these recommendations are considered by Congress in the development of the Federal Act.

The Task Force discussed establishing criteria and developing prioritized lists and raised possibilities for the federal legislation. Task Force members also submitted input outside of meetings directly to the Task Force Chair, Secretary Reville. The final product of the Education Facilities Task Force is comprised of the recommendations and prioritization criteria described herein as well as the attached project lists for charter schools, state and community colleges and the University of Massachusetts.

#### 2. Members

Below are the representatives on the Education Facilities Task Force:

Name	Title	Agency / Organization
Reville, Paul (Chair)	Secretary	Executive Office of Education
Adelman, Ed	Executive Director	State College Building Authority
Bowles, Ian	Secretary	Executive Office of Energy and Environmental Affairs
Chester, Mitchell	Commissioner	Department of Elementary and Secondary Education
Clark, Fred	Executive Officer	Council of Presidents, Massachusetts State Colleges

Name	Title	Agency / Organization
Beckwith, Geoff	Executive Director	Massachusetts Municipal Association
Bolling, Bruce	Executive Director	Massachusetts Alliance for Small Contractors
Craven, Katherine	Executive Director	School Building Authority
Friedman, Eric	Director of State Sustainability	Executive Office of Energy and Environmental Affairs
Gosnell, Tom	President	American Federation of Teachers, Massachusetts
Kelley, Aundrea	Acting Commissioner	Department of Higher Education
Kershaw, Amy	Acting Commissioner	Department of Early Education and Care
McKenzie, David	Executive Director	University of Massachusetts Building Authority
Motta, Jan	Executive Director	Massachusetts Community Colleges Executive Office
Pardee, Mav	Program Manager	Children's Investment Fund
Ramirez, George	General Counsel	Department of Business and Technology
Wass, Anne	President	Massachusetts Teachers Association
Williams, Michael	Director, Office of Programming	Division of Capital Asset Management
Wilson, Jack	President	University of Massachusetts

### 3. Key Objectives of the Education Facilities Task Force

The objective of the Education Facilities Task Force is to maximize the effectiveness and reach of any available capital funds to be used towards providing enhanced educational opportunities for students at every stage in their education. Each sector of the education system was represented on the Task Force from early education through higher education. Consequently, a primary goal of the Task Force was to identify the unique attributes of each sector and to set forth the relevant prioritization criteria. The next step is for the Secretary, as representative of all three sectors together, to take a holistic view of the Commonwealth's education delivery system and apply the criteria in making recommendations to the Governor.

#### Governor's Guiding Principles

Guiding Principles	Description
<b>Invest for the Long Term</b>	All projects under this program should have a long-term benefit, in addition to the stimulus effect of putting people back to work now.
<b>Limit Impact on Operating Budgets</b>	Prefer investments that will reduce – or at least not add to – demands on the operating budget.
<b>Follow Established Infrastructure</b>	Make choices based on Development Cabinet infrastructure recommendations.

Guiding Principles	Description
<b>Priorities</b>	
<b>Diversify</b>	Subject to whatever constraints there may be in the federal legislation, prioritize projects for funding in a manner that ensures funds will be allocated across a variety of industries and geographic locations.
<b>Buy Massachusetts</b>	To the extent possible, contract with Massachusetts contractors, purchase goods and services from Massachusetts companies, and hire Massachusetts people.

### Other Guiding Principles and Criteria

In addition to criteria laid out in the “Shovel-Ready Project” section below, other relevant facts and considerations include:

- Campus-managed projects will have the quickest stimulus impact;
- Public higher education institutions need to build capacity in response to rising consumer demand;
- DCAM higher education facilities management capacity has been increased in anticipation of an increased level of GO bond-funded projects;
- The Bond Bill project prioritization considered regional needs and Commonwealth workforce development priorities;
- The extent to which the project is consistent with the Higher Education Bond Bill priorities (e.g., consideration of STEM benefit or other Commonwealth programmatic/occupational/industry priorities);
- The ability of the investment to leverage capacity of other potential funds (e.g., planned MSCBA bond-financed projects over the next two years);
- How much state General Obligation (GO) capital spending will occur over the next few years at selected campuses; and,
- The square foot allocation of stimulus funds for deferred maintenance use.

Consideration should also be given to issues more directly relevant to educational concerns but that remain consistent with overall state objectives. For example, higher education investment is an economic development investment; analysis has shown that the Commonwealth’s return on investment in public higher education can exceed that of other state economic development initiatives.

Additionally, for projects in every sector, the Task Force also recommend that consideration be given to whether the project fosters occupational safety and health goals. This factor speaks to investing for the long-term and will also limit the impact on operating budgets. Whether the project is abating asbestos in a school or replacing or updating equipment (such as ventilation systems) to improve the air quality in a school or other educational facility, these projects have long-term benefits to the safety and health of the building occupants: namely, educators, students and the general public. For example, an asbestos abatement project reduces the need for an ongoing operations and management plan to address existing asbestos in the school, which requires that the school contract with a consultant to develop and update the plan. Additionally, improvements to ventilation and other equipment generally reduce maintenance costs and are more energy efficient.

### **Massachusetts Public Higher Education Capital Master Planning Process**

The Massachusetts Public Higher Education Capital Master Planning Process, which was completed in 2008 and included comprehensive master plans for each state and community college considered within a regional context, can be instructive. The priorities that emerged from the capital master planning exercise were influenced by two key objectives:

- Addressing overall institutional capacity deficiencies; and,
- Enhancing program capacity in areas of economic need, especially STEM fields.

The capacity issues that were not addressed in the comprehensive capital master planning process – because this effort was focused on academic and student support facilities – relate to housing and parking. Housing projects on Massachusetts public campuses do not receive state support and are true revenue-backed auxiliary enterprises. Housing projects can also have a significant impact on an additional educational priority, graduation rates, because residential status correlates strongly with persistence and graduation. Renovations of residential facilities and instructional facilities can increase capacity in terms of both overall enrollment and programs in high-need areas. Renovations to bring facilities into compliance with ADA regulations can increase capacity for students with disabilities. Additionally, only a few parking projects have been funded through the state G.O. process, and when they have, it has been combined with a roadway project.

These capacity concerns are as real as academic space capacity matters. A number of colleges have submitted parking and road projects; these are projects that could be delegated by DCAM and could meet the “shovel-ready” and completion windows. On the housing front, currently community colleges are prohibited by statute from providing housing. Further, like the bond bill projects, these facilities would never meet the imposed commencement and completion windows. As for the state colleges, housing is critical to retention efforts and a number of new facilities are in the planning stage (new residence halls at Salem and Worcester were to be funded in a February 2009 issuance and new housing at Framingham and Mass Art, and possibly Westfield, were to be funded in a February 2010 issuance). Unfortunately, the current market conditions have resulted in interest rates that make these projects financially tenuous. Support for residence hall construction meets Commonwealth economic development objectives (jobs and housing), higher education objectives (increased retention and graduation rates), and economic stimulus objectives (short-term, and leveraged, capital investment).

## **4. “Shovel-Ready” Projects**

Evaluation of project readiness and prioritization criteria for entities within each sector is described below. The entities are treated differently depending on whether they are public or private and depending on the mechanisms already in place to fund their capital needs. The Task Force gathered extensive lists of proposed capital projects for state and community colleges, the five campuses of the University of Massachusetts and charter schools. For K-12 districts, early education providers and private colleges and universities, the Task Force recommends different approaches to prioritization.

The prioritization criteria reflect the objective of representing each sector in education from early education through higher education across the Commonwealth, including both public and private providers, and accounting for the unique attributes of each.

### **Early Education Providers and Private Colleges and Universities**

Because early education providers and private colleges and universities are not public entities, the Task Force has taken a different approach for their projects. The Task Force is not treating individual requests from private educational institutions as projects for prioritization, but rather, consistent with the Private Development Task Force’s suggestion, the Education Facilities Task Force recommends creating a fund that would provide grants and/or low-interest or no-interest loans to educational non-profits for stalled repair, rehabilitation and construction projects. Should such a fund be created, a set

of criteria that reflects the prioritization of early education and low-income students and ensures the distribution of these funds in a manner consistent with the state's overall goal of creating a seamless birth-to-higher education system will be developed.

The Task Force also proposes a federal guarantee for bonds issued for these purposes. This will permit any project funding that may flow from the Federal Act to be focused on this work, while issuers of municipal bonds, which have access to project revenues, could also benefit from a reduced cost of borrowing to reduce the cost to students and other facility users. Presently issuers of tax-exempt revenue bonds are not able to readily access the credit markets due to high interest rates, which push the cost of capital above that which can be supported by affordable project costs, and a "flight to quality" which has reduced demand for all but the very highest rated issues. A federal guarantee would limit the extent of this problem.

Under this proposal, the federal government would guarantee the first \$150 million of an A-rated issuer's municipal bonds for infrastructure and educational facility projects issued prior to June 30, 2009. This would substantially reduce the cost of borrowing for the issuer (and, hence, the cost to the rent and rate payers) while not requiring the federal government to pay a direct cost. This would stimulate economic activity in the near term while allowing the normal processes of issuing debt and collecting project revenues to continue as usual. There are many issuers across the Commonwealth and the country that might otherwise need to defer critical projects and their accompanying economic activity. Issuers with A ratings are extremely unlikely to default on these bonds.

## **K-12**

Projects in the K-12 sector represent a significant opportunity for purposes of both enhancing the quality of educational opportunities and as a method of economic stimulus. The Massachusetts School Building Authority (SBA) manages the state school building grant program for K-12 public school district facilities. SBA dollars help municipalities and regional school districts with local operating budget shortfalls, lowering local tax rates and using funds formerly tied up in school debt service for other local capital improvement projects.

Over the past several years the SBA has developed a thorough and efficient system for administering and overseeing public funds to K-12 public district schools. For any federal funds that become available, then, distribution through the SBA would provide more accountability and quality control than a general distribution of funds to municipalities. The SBA currently has a long list of projects in its pipeline at varying stages of readiness. If a significant amount of money becomes available via the federal legislation for K-12 construction, there are a number of alternative ways to spend it, including institution of:

- An improvement program for machinery and equipment at vocational high schools;
- A program of "accelerated design" using model schools;
- A program of repairs and modernization projects;
- Paying for a percentage of the local share of a broad distribution of planned projects in the existing pipeline; and,
- Incentivizing various steps towards districts providing regionalized services.

Alternatively, if the amount of money available through the Federal Act is more modest, it would be sensible to have the SBA administer a statewide small repairs program.

## **Charter Schools**

Charter school facilities require a unique set of considerations. To the extent allowed by the federal legislation, the distribution of capital funds to these important public schools will be facilitated. However, the analysis of when, to what extent and how public dollars are used to finance charter



facilities is complicated by the following set of circumstances. Unlike with regular district schools, which use SBA funds to pay for 40% to 80% of their building costs, there is currently no entity in place to fund charter school construction. Charters get a per pupil amount from the state for facilities (in fiscal year 2009, this amount was \$893/pupil), but they must otherwise rent or purchase space without state assistance. Additionally, in most cases, if a charter school were to close, the charter facility owned by the charter operator would become state property. For some charter schools this is not the case, and upon closing these charter schools would revert to a private property owner. Consequently, the answer to whether and how public funds should be used may depend on the ownership structure for each individual school.

## **Higher Education**

The Higher Education projects include those recommended by 1) State and Community Colleges and 2) the University of Massachusetts. The project identification, categorization and prioritization processes are different for each of these groups.

### 1) State and Community Colleges

For state and community college projects the Task Force proposes can be categorized in three broad areas: 1) General Campus Allocations, 2) Mid-Sized Project Allocations and 3) Large Size Project Allocations. This proposed categorization approach will ensure:

- Broad geographical coverage and operating budget relief while investing in necessary capital maintenance;
- Completion of significant mid-scale adaptation and new capital projects that are difficult to fund from campus operating budgets that are also not identified in the higher education bond bill (as this bill focused predominantly on large-scale, new construction projects); and,
- Escalation (and in some instances expansion) of bond bill-identified priority projects that will facilitate implementation of all higher education capital master plan priority projects over time.

For each of these three allocation categories, projects that are “shovel-ready” within 180 days have been identified. Additional description on the types of projects in each category, their funding mechanisms and proposed management structure is provided below.

#### *1) General Campus Allocations*

Includes funding for deferred maintenance, adaptation, and renewal of facilities at each of the Commonwealth’s state and community colleges. Funding could be allocated on a square footage basis, as has occurred in the past using an allocation of GO bond deferred maintenance support. These funds would also partially alleviate operating budget reductions resulting from decreased state appropriation support. Finally, locally-managed individual projects would generally be less than \$2 million and could be completed quickly. The current individual project campus-management delegation cap is \$1 million (a request has been submitted to raise cap to \$2 million).

#### *2) Mid-Sized Project Allocations*

Campus-identified projects exceeding \$2 million are included in this category and would be managed by DCAM or the Massachusetts State College Building Authority (MSCBA) as new stand-alone projects or combined with current DCAM or MSCBA projects. Funding would be allocated to campus-identified projects determined to meet “readiness” criteria and consistent with the articulated “Guiding Principles.” Lower range projects could be initiated as new DCAM or MSCBA projects that could meet spending timeline criteria and upper range projects could be appended to existing DCAM or MSCBA projects with designers and contractors under contract.

### 3) Large Size Project Allocations

Funding could support currently ongoing projects managed by DCAM or MSCBA, and/or expansion or escalation of those projects. Projects in this category would generally exceed \$8 million but can still meet spending timing criteria.

Part of these considerations should account for whether the project can be assigned to the MSCBA, can be managed locally or whether the project has to be managed through DCAM. Any project costing more than \$5 million and up to \$8 million, even if it were ready to bid today, would take significant time to ramp up and could span more than two years. If the state does choose to undertake a few large projects (above the noted dollar thresholds), campus academic capacity should be considered as confirmed by utilization studies completed as part of campus Capital Master Plans; the state should also recognize that these projects could go beyond two to three years.

### 2) University of Massachusetts

Below are the prioritization criteria the Task Force recommends for University of Massachusetts projects:

*Institutional Strategic and Long-Range Planning:* The degree to which a project supports the University's strategic priorities and aligns with the University's Capital Plan:

- Enhance Student Learning Experience
- Maintain Affordability and Access
- Strengthen Research Enterprise
- Improve Delivery of Administrative and IT Services

Assumptions and forecasts may include such indicators as demographic, economic, and technological issues affecting the University's programs and services.

*Commonwealth or Education Sector Initiatives:* Project is a crucial part of the government's growth plan or impacts a population group, geographical area, or political jurisdiction of special concern. Projects may be used to enhance specific instructional capabilities, improve the economic development potential for Massachusetts, or provide better service to the Commonwealth's citizens. Projects should be selected based on their potential to spur innovation and discovery.

*Responsible Stewardship:* Project is necessary to maintain the functional level of existing assets. Focus should be placed on working on issues that if not resolved will prove to be a drain on resources in the future.

*Environmental Benefits:* Project will result in energy conservation, water conservation, or hazardous material remediation. Projects that encourage sustainable activities and further develop green engineering.

*Leverage Existing or Potential Funding Sources:* Complete projects that are only partially funded or that could lead to additional support. In addition, any project with strong potential for cost recovery should be funded.

*Project Criticality:*

- *Life Safety Emergency* – Project directly relates to protecting lives or correcting hazardous conditions.
- *Code/Legal Compliance* – If the project is not funded, legal action against the University is possible.
- *Prior Binding Commitment* – The project is required to be undertaken due to commitments created through actions of the Commonwealth or the University.
- *Agency Mission* – Functional projects that enable an agency to fulfill a core mission.

*Immediate and Long-Term Job Creation:* Support projects with the highest amount of construction jobs created and projects which have documented job growth studies reflecting the number and types of occupations to be employed.

*Other Considerations:* An open category for projects that present unique opportunities or extenuating circumstances not covered by the other criteria.

## 5. Projects

For a detailed list of projects see *Project List* in Part 4 in the report. The table below provides a high-level summary of project costs by each entity:

Types of Projects	Total Federal Act Request (\$ Millions) *
State & Community Colleges	\$2,215 **
UMASS	\$831.5 **

\* State & Community Colleges the \$ amount includes 19 DCAM projects and 17 MSCBA projects

\*\*Excluding duplicates with DCAM the Total Federal Act Request for State and Community Colleges is \$1,330 MM and \$735 MM for UMASS. Please refer to Section IV of the report for a detailed list of duplicates

## 6. Agency Staffing Plans

The following table provides a summary snapshot of the staffing needs discussed in more detail throughout this section.

	K-12 and Charter Schools	Higher Education (DCAM)	University of Massachusetts
<b>Federally funded FTE Request Based on Agency Staffing Analysis</b>	.25-2	See DCAM staffing plan in the <i>State Facilities and Courts Task Force Section</i>	1

### K-12 and Charter Schools

If the Federal Act requires that aid for district K-12 schools is to be sent directly to local educational authorities, staff time will need to be devoted to basic grant administration (processing applications, distributing funds, collecting required reporting) and oversight (desk or on-site monitoring to see that funds are spent on construction and in accordance with requirements). If, however, the Federal Act allows a state entity to distribute the funds via a state-determined process, the SBA would be the

likely administrator. Depending on the level of funds provided and oversight required, additional staffing may be required to administer these funds to district schools.

If the Federal Act requires that stimulus funds for charter schools are to be distributed directly to local educational authorities, there will need to be staff time devoted to basic grant administration (processing applications, distributing funds, collecting required reporting) and oversight (desk or on-site monitoring to see that funds are spent on construction and in accordance with requirements). Depending on the level of oversight, .25 to .50 additional FTEs may be required to administer these funds to charter schools.

If, however, access to stimulus funds for capital projects were allowed to be determined based on a state-level review process (focusing, e.g., on need or other criteria), with evaluation of project plans, etc., depending on the competitiveness of proposals and number that were able to be funded, 1.0 to 2.0 additional FTEs may be required to administer the funds to charter schools in this manner.

These staffing requirements may be lower if federal funds for charter schools are administered from a single office (e.g., School Building Authority, single contractor or MSCBA) in conjunction with the other public school construction projects.

### **Higher Education**

A comprehensive list of potential Federal Act higher education capital projects has been compiled under the auspices of the Executive Office of Education. The Higher Education projects include those recommended by 1) State and Community Colleges and 2) the University of Massachusetts. The staffing plan for these projects corresponds to the three categories identified in the previous section of this report, as well as a fourth category for University of Massachusetts projects to be managed by the UMass Building Authority.

Campus-submitted projects range from small, deferred maintenance projects to large, new construction projects. Projects are categorized below by the manner in which project management could occur; each of these models have varying oversight approaches:

- 1) Campus Management – Smaller scale primarily maintenance and renovation projects (delegated projects up to \$2.0 million total project cost). At campuses, existing facilities staff oversee the procurement process while contracting for specific services.
- 2) Massachusetts State College Building Authority (MSBCA) Management – Residence and selected non-academic facilities projects at state colleges. In-house project coordinators act as both project managers and oversee project-specific contracted project management consultants.
- 3) DCAM Management – Manages “large scale” and other selected projects with in-house, full-time, staff that serve as project managers (campuses also often employ/assign additional “owners representatives” for large-scale DCAM projects).
- 4) UMass Building Authority – Manages selected residence, academic, and non-academic facilities at the University of Massachusetts campuses. UMass also has in-house project coordinators that manage and oversee projects, similar to the MSCBA.

The ability to undertake projects through four different management arrangements provides desirable flexibility and capacity to meet Federal Act spending criteria stipulations.

DCAM has submitted a staffing plan based on an assumed level of \$300 million in federal funding for projects (higher education as well as other state agencies) to be managed directly by DCAM. Based on various assumptions, DCAM has estimated the need for 53 FTEs to manage their overall project workload (\$300 million in projects). Of the over 400 potential State College and Community College

projects totaling over \$1.4 billion that were identified as part of the Executive Office of Education potential capital projects identification process, 21 projects totaling approximately \$85 million have been affirmatively identified by DCAM – that DCAM would manage – for Federal Act funding consideration.

MSCBA has affirmatively identified 16 projects totaling approximately \$52 million – that MSCBA would manage – for potential federal funding consideration. Except for the two proposed athletic field projects, proposed MSCBA-managed projects have already been assigned to in-house staff and contracts have been signed with project management consultants and an architect/general contractor team for each project. Cost for project management staff and consultants is included in the noted projects requested funding. Similarly, the University of Massachusetts Building Authority has assigned current projects – that meet stimulus priorities and spending window stipulations – to in-house staff with independent management consulting contracted as necessary with costs included in the projects funding requests.

Campuses oversee local capital procurement through in-house staff and contracted support (predominantly architectural and engineering). Capacity exists at the campus level to manage potential federally-funded capital projects; many projects that have been forwarded for federal funding consideration have been fully developed and are ready to bid, and that would have been paid for through local funds, but have been put on hold due to reduced state appropriation support. An allocation of approximately \$100 million across the system could be addressed by current staff at the 15 Community Colleges, nine State Colleges, and five University of Massachusetts campuses (as this level of capital spending is not significantly greater than annual locally-funded capital procurement levels). Potential federal funding allocations exceeding this scope may need premium funding for additional contracted management support (alternatively, campuses would likely allocate a portion of requested project funds to additional management consultant support).

Additional agency staffing needs in response to potential Federal Act funding for higher education projects is somewhat mitigated due to the ability to assign projects to various agencies (DCAM, State Colleges and UMass Building Authorities, and Campuses) based on size and types of projects; this multiple assignment opportunity significantly enhances the likelihood that federally funded capital projects spending stipulations can be achieved.

For further detail on staffing for shovel-ready higher education projects identified by DCAM, please refer to the State Facilities and Courts Task Force section of this report.

### **University of Massachusetts**

The University has approximately 42 FTEs related to capital. The five campuses design, manage, and construct many of their own projects. The UMass Building Authority also has three FTEs, but they contract out most of their work. The FY2009 Total Capital Budget for the University is presently \$325 million.

UMass is requesting support for 95 projects with a total cost of \$956.5 million and a federal funding request of \$831.5 million. UMass would likely need one new staff member if the full funding is received. Notably, many of the University's top priorities would lead to permanent jobs/economic development beyond the immediate construction activity. For example, the ETIC and Wannalancit Buildings at UMass Lowell, the Sherman Center and ACCESS Building at the Medical School in Worcester, and the various lab renovations and Integrated Sciences Building at the Amherst campus would support new faculty and support staff as well as draw in more research funding for the Commonwealth.

## 7. Barriers and Obstacles to Achieve Objectives

Barrier / Obstacle	Mitigation Strategy / Actions Required
<b>K-12 Projects:</b> <b>Currently, funding mechanisms in the Federal Act do not enable prioritization of shovel-ready projects, as funding will flow into existing channels regardless of the type or readiness of projects in a given jurisdiction</b>	<p>The most prudent use of limited dollars may be to fund a special program of making small but important repairs to K-12 school facilities throughout the Commonwealth, consistent with the Governor's guiding principle of diversifying investments. Options include:</p> <ul style="list-style-type: none"> <li>• Ask the SBA to: develop a list of repair projects within a capped dollar amount and prioritized based on health and safety standards; verify need, priority and readiness of these submissions; and run a unique program for these investments separate and apart from the regular SBA program.</li> <li>• Report on the process the SBA develops, the objectives for the investments and how they would be monitored, and, to the extent possible, direct how those districts use the funds they receive.</li> </ul>
<b>Centralizing the tracking and performance monitoring of stimulus dollars spent on local projects</b>	<p>Ensure consistent application of quality control standards by instituting Commonwealth oversight outside of the federal funds distribution process.</p>
<b>Charter Schools:</b> <b>There is currently no entity that substantially funds charter school capital projects or has oversight over these projects</b>	<p>Alternatives for administering these one-time capital funds include:</p> <ul style="list-style-type: none"> <li>• Have the SBA operate a one-time program</li> <li>• Issue a contract for a project manager</li> <li>• Enlist a quasi-state building authority such as Mass Development or the MSCBA</li> </ul>
<b>Higher Education Campus Project Management Delegation</b>	<p>Requested increase in DCAM project delegation cap to \$2 million.</p> <ul style="list-style-type: none"> <li>• Currently, higher education campuses can manage projects up to \$1 million. It is requested that this delegation cap be increased, by change in statute, to \$2 million. Smaller scale projects that are locally managed (funded by broad allocation of federal funding support) can be immediately implemented to achieve stimulus objectives.</li> </ul>
<b>DCAM additional staff hiring and training needs*</b>	<p>DCAM Project Management approach will likely require (based on amount of stimulus funding provided) additional new staff and training.</p> <ul style="list-style-type: none"> <li>• While DCAM has increased the size of its staff devoted to higher education projects in anticipation of an increasing level of GO bond spending for public higher education capital projects, additional staff will likely need to be recruited or a new model that relies on outside, full-service construction program management firms will need to be considered.</li> </ul>
<b>Ability to accelerate final document preparation and bidding, as well as construction, of</b>	<p>For large scale (often new construction) projects, the proposed federally funded portion of the project is a component piece that can be bid as an early action item or as a scope expansion item.</p> <ul style="list-style-type: none"> <li>• Separate bid packages will need to be expedited to meet the Federal Act spending requirements; this may require architectural</li> </ul>

Barrier / Obstacle	Mitigation Strategy / Actions Required
<b>component projects*</b>	firm and/or general contractor premium costs.
<b>Contractor Certification/ Pre-Qualification Requirements*</b>	<p>DCAM has identified the need for agencies to be proactive in identifying potential contractors and assisting them in the certification/pre-qualification process.</p> <ul style="list-style-type: none"> <li>For Building Authority projects, a list of pre-qualified firms by trade has been identified and architect/general contractor teams are under contract for each identified project (excluding the athletic field projects) as permitted by the Authority's alternative procurement authority.</li> </ul>
<b>Timely notification of funding</b>	<p>Higher education project bids are being prepared for issuance in the next few months for the summer of 2009 construction season; new or expanded documents need to be completed in the near term to meet this construction window.</p> <ul style="list-style-type: none"> <li>Notification of federal funding would likely need to occur by the end of February in order to ensure significant summer activity.</li> </ul>

\* For more information on Permitting, Procurement and Workforce, please see *Section III, Cross-Cutting Task Force Overview*

## 8. Metrics for Measuring Success

### Metrics

It is proposed that the same metrics proposed by DCAM for all of its state-wide managed projects be employed for Campus-managed, MSCBA, and UMass Building Authority projects, as well as DCAM-managed higher education projects.

Metric *	Description	Method for Monitoring/Measurement
<b>Job Creation</b>	<ul style="list-style-type: none"> <li>Number of jobs created and duration for which they were created by each project funded.</li> </ul>	<ul style="list-style-type: none"> <li>Develop a system for tracking and analyzing total daily workers onsite per day through certified payroll or daily field reports; develop other methods to track indirect employment (e.g., income multipliers).</li> </ul>
<b>Facility Condition</b>	<ul style="list-style-type: none"> <li>Number of facilities improved and measurement of extent of improved condition based on Facilities Condition Index (FCI).</li> </ul>	<ul style="list-style-type: none"> <li>FCI = (Total Cost of Repair Backlog/Total Replacement Cost); <ul style="list-style-type: none"> <li>DCAM can do this using CAMIS database</li> <li>MSCBA has done this for residence life facilities</li> </ul> </li> </ul>
<b>Long Term Benefits</b>	<ul style="list-style-type: none"> <li>Administration infrastructure investment priority or priorities furthered; education core functions, missions and/or long-term programmatic goals furthered in some material and measurable</li> </ul>	<ul style="list-style-type: none"> <li>Analysis of operational improvements in terms of quality and quantity pre and post capital project.</li> <li>Evaluate the long-term impacts through the number of people served by the facility improvement.</li> </ul>

Metric *	Description	Method for Monitoring/Measurement
	way.	
<b>Efficiencies</b>	<ul style="list-style-type: none"> <li>This is a broad category that should be used to capture not only cost savings, but also environmental benefits of energy projects in particular (e.g., reducing carbon footprint)</li> </ul>	<ul style="list-style-type: none"> <li>Track the facility operating costs pre and post capital project.</li> </ul> <p>See the Energy Task Force section for specific energy efficiency metrics.</p>
<b>Diverse Benefits</b>	<ul style="list-style-type: none"> <li>Measure the geographic diversity of the investments.</li> <li>Number of different state agencies benefited; number of different state companies benefited; number of different trades benefited; number of different communities benefited.</li> </ul>	<ul style="list-style-type: none"> <li>Number of state agencies</li> <li>Number of companies in-state</li> <li>Number of trades</li> <li>Number of cities/towns</li> </ul>
<b>Project Delivery</b>	<ul style="list-style-type: none"> <li>Actual federally funded project delivery milestones and cost vs. federally funded projected schedule and budget.</li> </ul>	<ul style="list-style-type: none"> <li>Track schedule and budget performance against established metrics through web based cost control systems (Prolog, Expedition, MMARS, etc).</li> </ul>

\* For further detail on Metrics, refer to the *State Facilities and Courts Task Force* section of this report



## Energy Task Force

### 1. Introduction

The Energy Task Force was charged with identifying energy efficiency and clean energy projects at public sector facilities. Projects were required to reduce energy consumption or to increase the production of clean energy.

The Task Force met five times between December 16, 2008 and January 20, 2009 with increasing membership at each subsequent meeting. The first four meetings were used to progressively refine the list of projects and to address questions that arose and the fifth meeting was to review the final draft of the Energy Task Force report.

The Task Force included representatives from several state agencies and quasi-public authorities that manage or are responsible for a significant number of facilities in the state. It also included representatives from the two largest electric utilities in Massachusetts, from multiple energy industry associations, and from multiple labor organizations.

The task force identified \$1.16 billion of energy efficiency and renewable energy investments that when complete will reduce annual energy expenditures by \$103 million, paying for themselves within 11.4 years. These investments would also create about 10,400 jobs across the state and across various industries.

In an undertaking such as this mobilization, there is the possibility of project duplication among projects and resulting job creation estimates between task forces. While efforts were made to coordinate with other task forces, it is possible that there remain some overlaps. The most likely overlaps would be with the State Facilities and Education Facilities task forces since many projects contain elements that fall into the domain of each of these areas. Efforts to resolve duplicates should be continued to remedy this issue.

Responsibility for monitoring rests with the agencies identified in *Section 5* below, in coordination with the Department of Energy Resources and any other entities identified in the Federal Act. Finally, project results will be communicated using the channels and requirements outlined in the Federal Act.

### 2. Members

Name	Title	Agency / Organization
Bowles, Ian (Chair)	Secretary (Task Force Chair)	Energy and Environmental Affairs
Aikens, Marty	Business Agent	Local IBEW 103
Alabiso, Vin	Director of Finance	Mass. School Building Authority
Arthur, Robert	Industry Director for Energy	Mass. Office of Business Development
Baker, Jen	Chief of Staff	Clean Energy Center
Bartlett, Maeve	Assistant General Manager for Environmental Compliance	MBTA
Bickelman, Ellen	State Purchasing Agent	Operational Services Division
Brennan, Andrew	Director of Environmental Affairs	MBTA

Name	Title	Agency / Organization
Burt, Lauri	Commissioner	Department of Environmental Protection
Cherullo, Andy	Chief Financial Officer	Mass. School Building Authority
Codner, Bill	Principal Analyst/ Municipal Program Manager	National Grid
Cogswell, Jessica	Director for Fiscal and Administrative Policy	Department of Higher Education
Conner, Penni	Vice President, Customer Care	NSTAR
Deegler, Marcia	Director of Environmental Purchasing	Operational Services Division
Dempsey, Brian	Chairman, Committee on Telecommunications, Utilities, Energy	Massachusetts House of Representatives
Douglas, Brian	Budget Director, Office of the President	University of Massachusetts
Duros, Anthony	Director of Engineering Admin & Utilities	Mass. Turnpike Authority
Edmondson, Lucy	Deputy Commissioner, Policy	Department of Environmental Protection
Erllich, Mark	Executive Secretary-Treasurer	New England Regional Council of Carpenters
Friedman, Eric	Director, Leading by Example	Department of Energy Resources
Gilligan, Donald	President	National Association of Energy Services Companies
Giudice, Phil	Commissioner	Department of Energy Resources
Gromer, Paul	President	Peregrine Group
Gundal, Frank	Manager Analog Energy Services	NSTAR
Hall, Debra	Sustainability Program Developer	Department of Housing and Community Development
Hamel, Dale	Acting Associate Commissioner	Department of Higher Education
Ide, Jenna	Manager, Energy Efficiency & Sustainable Buildings Group	Division of Capital Asset Management
Joyce, Steve	Director of Research	New England Regional Council of Carpenters
Lenhardt, Stephen	Vice President/ Treasurer	University of Massachusetts
MacDonald, Alison	Senior Budget Analyst, Office of the President	University of Massachusetts
McCready, Travis	Chief Operating Officer	Mass. Convention Center Authority

Name	Title	Agency / Organization
McCullough, Rick	Director of Environmental Engineering	Mass. Turnpike Authority
Mohta, Vivek	Director, Energy Markets	Department of Energy Resources
Morrissey, Michael	Chairman, Committee on Telecommunications, Utilities, Energy	Massachusetts Senate
Murray, Hubert	Manager of Sustainable Initiatives, Real Estate and Facilities	Partners Healthcare
Naughton, Joe	Senior Budget Analyst, Office of the President	University of Massachusetts
Patneaude, Kristen	Program Manager, Energy Management	Mass. Water Resources Authority
Phillips, Ellen	Deputy State Purchasing Agent	Operational Services Division
Ribeiro, Lori	Senior Consultant	Blue Wave Strategies
Rizzo, John	President	American Development Institute
Schectman, Amy	Associate Director for Public Housing and Rental Assistance	Department of Housing and Community Development
Sleiman, Sam	Director, Capital Programs & Govt. Affairs	Massport
Snyder, Nancy	President	Commonwealth Corporation
Sullivan, Greg	Inspector General	Office of the Inspector General
Woolf, Tim	Commissioner	Department of Public Utilities

### 3. Key Objectives for Energy Task Force

The objective of the task force is to reduce energy use to the greatest extent possible and to replace fossil energy with clean energy. In addition to creating substantial new jobs, these investments will accelerate the transformation in energy use and generation required to meet the long-term energy and environmental goals of the Commonwealth.

#### Governor's Guiding Principles

All projects submitted by the Task Force are aligned with the Guiding Principles outlined by the Governor. All projects reduce energy consumption or support clean energy production—two established infrastructure priorities—and, as a result, reduce energy expenditures and demands on the operating budget.

Projects at state government facilities will contribute to the clean energy goals set forth in Executive Order 484. This Order calls for state government to:

- Reduce energy use on a BTU per square foot basis 20% by 2012, 35% by 2020.
- Increase use of renewable electricity to 15% of total electricity consumption by 2012, 30% by 2020.
- Reduce total greenhouse gas emissions 25% by 2012, 40% by 2020, 80% by 2050. Of the \$1.16 billion worth of projects, \$541 million, or 47%, are at facilities covered by this Executive Order.

In addition, the projects would, in aggregate, create several thousand jobs in Massachusetts since many of the services and goods can be contracted within the Commonwealth. A majority of direct jobs created would be in engineering, construction, and professional and technical services. There would be a number of additional direct and indirect jobs in the retail and wholesale trades. Finally, the projects are spread across the Commonwealth.

Guiding Principles	Description
<b>Invest for the Long Term</b>	All projects under this program should have a long-term benefit, in addition to the stimulus effect of putting people back to work now.
<b>Limit Impact on Operating Budgets</b>	Prefer investments that will reduce – or at least not add to – demands on the operating budget.
<b>Follow Established Infrastructure Priorities</b>	Make choices based on the infrastructure recommendations recently approved at the Development Cabinet.
<b>Diversify</b>	Subject to whatever constraints there may be in the federal legislation, prioritize projects for funding in a manner that ensures funds will be allocated across a variety of industries and geographic locations.
<b>Buy Massachusetts</b>	To the extent possible, contract with Massachusetts contractors, purchase goods and services from Massachusetts companies, and hire Massachusetts people.

#### 4. “Shovel-Ready” Projects

The universe of potential projects that this task force initially considered was extremely large since it included any energy-related opportunity at a public facility. We first sorted these projects by readiness, identifying those projects that had been sufficiently defined and scoped to be genuinely shovel-ready within 180 days. Projects having a longer timeframe until shovel-readiness, such as 360 and 720 days, were assembled in case federal funding criteria were different than expected. We then filtered out projects that were better categorized as new construction or deferred maintenance rather than energy efficiency or clean energy.

The taskforce meetings and project lists that were generated provided a fertile ground for cross-pollination of ideas, leading to further refinement. For example, seeing how an agency effectively bundled projects of similar types together for procurement led others to do the same. In general, agencies agreed that bundling projects that involved similar work, e.g., rooftop solar panels, within a property-managing entity would be effective. The task force agreed on the following six project types:

### Energy Efficiency

- *Shallow*: Projects that require no design and can be activated via a state contract immediately and completed within three to six months. Typical projects include: Energy audit, Energy efficient appliance replacement, and Energy efficient lighting.
- *Medium*: Energy audit and design but focusing on easy / quick / "plug and play" solutions. Typical projects include: High efficiency HVAC, upgrade Energy Management System (EMS).
- *Deep*: More thorough energy audit and design but including larger, medium term replacements or change. Typical projects include: Comprehensive energy efficiency (EE) retrofit.

### Renewable energy

- *Solar PV*: Photovoltaic (PV) based solar panels for energy generation either on roof top units or mounted on the ground. PV projects are typically turnkey projects.
- *Wind*: Wind turbine projects typically are turnkey projects that include the design, build and installation of either a micro wind turbine or a full scale wind turbine. Utility scale wind farms are not included.
- *Other RE*: Includes renewable energy from Geothermal, Biomass, and Hydro resources.

## 5. Projects

For detailed information about projects, see the *Project List*. The table below provides a high-level summary of project costs by each entity:

Project Entity/Agency	Total Federal Act Request (\$)
Convention Center	\$15,935,500
DCAM	\$279,431,863
DCR	\$63,988,000
DEP (inc. DEP WW)	\$21,840,000
Department of Fish & Game	\$14,535,000
DHCD	\$114,671,760
MA School Building Authority	\$350,500,174
Massport	\$31,700,0000
MBTA	\$4,450,000
MTA	\$4,946,000
MWRA	\$31,423,200
State & Community Colleges	\$48,313,992
State College Building Authority	\$5,564,000
University of Mass. System	\$171,990,500

Project Entity/Agency	Total Federal Act Request (\$)
<b>TOTAL</b>	<b>\$1,159,289,990</b>

## 6. Agency Staffing Plans

Each agency submitting projects is fully committed to responsibly oversee the projects identified. Responsibility for oversight of energy projects rests with: Division of Capital Asset Management for state agencies, the University of Massachusetts system, and state and community colleges; Department of Housing and Community Development for local housing authorities; Massachusetts School Building Authority for public schools; and each quasi-public authority for projects at its own facilities.

Contracting for a vast majority of projects will be handled as “design-build” projects pursuant to Chapter 25A of the Mass General Laws and proceed through existing contracting channels.

Effective oversight of energy efficiency and clean energy projects requires specific expertise and previous experience. In addition, projects funded by the Federal Act will be completed in a short time frame and will not require permanent additions to agency staff. For both of these reasons, agencies are planning to utilize project specific consulting firms with expertise in energy or construction to assist staff with project oversight. Agencies have identified these staffing needs within their staffing plans and will hire temporary employees with the requisite skills (see staffing plans within the *State Facilities and Courts Task Force Report*). There are already a number of statewide contracts with such firms that agencies can utilize.

Field and project oversight is estimated at 3-10% of total project cost depending on the complexity of the contract. Simpler, e.g. turnkey, contracts will require less oversight than more complicated time and materials contracts with multiple components. No new permanent government hires will be required.

## 7. Barriers and Obstacles to Achieve Objectives

Barrier / Obstacle	Mitigation Strategy / Actions Required
<b>Procurement process delays</b>	<p>Accelerate energy efficiency procurement process</p> <ul style="list-style-type: none"> <li>• Establish a technical center at an existing institution to educate/advise facility management on energy efficiency throughout entire process</li> <li>• Bundle many projects across state and local government in a consolidated contract</li> <li>• Develop a standard contract to be used across (bundles of) projects</li> <li>• Define standards for installed technology and for pricing of components of energy efficiency services</li> <li>• Commit <i>both</i> sides of contract to a strict schedule</li> </ul>
<b>Workforce capacity constraints</b>	<p>Accelerate and expand the planned rollout of Green Jobs training programs by the Clean Energy Center, as referenced in the Workforce Task Force report:</p> <ul style="list-style-type: none"> <li>• Train existing and new members of the building trades on energy efficiency</li> <li>• Coordinate with ongoing training activities by building trades'</li> </ul>

Barrier / Obstacle	Mitigation Strategy / Actions Required
	<p>organizations</p> <p>Optimize utilization of energy engineers</p> <ul style="list-style-type: none"> <li>• Likely the most significant capacity constraint and requires significant training and experience</li> <li>• Can maximize value of energy engineers' time by off-loading all non-essential tasks to other personnel</li> </ul> <p>Update DCAM list of contractors for energy efficiency and solar energy.</p>

Permitting is not expected to be a constraint for 180-day shovel-ready projects. Energy efficiency and solar energy projects, which make up a bulk of the 180-day shovel-ready projects list, do not require permitting in most circumstances.

## 8. Metrics for Measuring Success

It is expected that there will be specific metrics to accompany the Federal Act. The Energy Task Force will support the collection of these metrics. In addition, the task force outlined primary metrics for measuring success, including reduced energy usage and increased clean energy production.

Metric	Description	Method for Monitoring/Measurement
<b>Reduced energy usage</b>	Energy efficiency project performance will be measured by reduced energy usage relative to energy usage prior to the project. Annual reductions will be reported in BTU, BTU per square feet of building space, and in percent terms.	For those projects completed through an Energy Savings Performance Contract, the contractor will guarantee energy savings and monitor and report them periodically. For other projects, performance will be estimated through stipulated savings for installed equipment and measured through utility bills reported into DOER's Energy Information System or an analogous system.
<b>Increased clean energy production</b>	Clean energy project performance will be measured by increased clean energy production. Annual increases will be reported in kWh and in percent terms.	Clean energy projects will be metered with inexpensive "revenue quality" meters to ensure accuracy and qualification for revenues from Renewable Energy Certificates. Production will be reported through the Renewable Energy Trust Production Tracking System or an analogous system.

## Information Technology (IT) Task Force

### 1. Introduction

In today's environment, Information Technology (IT) is an element of almost everything we do. IT is as much a component of modern infrastructure as roads and bridges. Over the years, the Commonwealth has come to rely on IT to support the operation of state government. More importantly, IT has enhanced and enriched the quality and reach of vital services that the Commonwealth provides to citizens and businesses, improving the quality of lives as well as transforming government by making it more accessible, efficient, and responsive to the public.

The IT Mobilization Task Force represents every branch and virtually every office of state government, along with the Massachusetts eHealth Institute (MeHI). Through an extraordinarily collaborative effort, consistent with its charge, the IT Task Force identified critical projects that will not only stimulate the Massachusetts economy but also provide long term and sustained benefits to every segment of society. More specifically, the projects:

- Will generate Massachusetts jobs in the near-term and strengthen the Massachusetts workforce for the long-term at all levels throughout the Commonwealth's economy. The jobs that will be created and sustained are skilled "knowledge" jobs.
- Adhere strictly to the Governor's Guiding Principles for mobilizing the state-wide efforts to ready projects and receive funding from the Federal Act.
- Create transformational services that will position the Commonwealth as fertile ground for economic development and growth in the health care, education, and technology sectors.
- Make state government more efficient, effective, accessible and responsive for citizens and businesses.
- Are ready to move forward now. The Task Force has reached broad consensus on a list of high-value IT and eHealth projects that are ready to begin within 180 days. In addition, the Task Force has developed a priority-setting process and set of tools for the IT Projects to enable a consensus approach to prioritizing the list consistent with Federal Act objectives and Commonwealth goals.

The projects proposed by the IT Task Force will advance the Commonwealth's automation capabilities at a time when we need greater efficiency and streamlining to adjust to the difficult financial circumstances we face. In short, these move projects beyond simply renovating what is aging; instead, they *innovate* for a 21st century state government that will better serve citizens, prepare the future workforce, and nurture and support businesses and communities more effectively and efficiently.

The projects reviewed by the IT Taskforce take two forms:

- 1) IT Projects that were submitted by the judiciary, secretariats, and agencies across state government, and
- 2) eHealth projects that are the culmination of years of thoughtful and collaborative work to improve the efficiency and effectiveness of health care delivery in Massachusetts.

The IT project list comprises 194 initiatives valued at \$975 million. Recognizing that there are many important and potentially competing demands for infrastructure investment, the IT Task Force has



developed a priority-setting process and tool capable of narrowing the list of IT projects to fit the shape of the Federal Act<sup>2</sup> and budget.

The four eHealth projects total \$513 million. The entire program is fully designed, developed, and “shovel-ready.” These projects will create state-wide, interoperable Electronic Health Records (EHRs) as part of an ubiquitous Health Information Exchange (HIE). When complete, this system will improve the healthcare of millions of residents of the Commonwealth, lower the costs of health care, and create good jobs. The program has been designed to ensure the security of data and the privacy of all individuals.

By tapping the rich knowledge and experience in health care in the Commonwealth, the Task Force offered a forum for focusing eHealth options down to an essential sequence of initiatives that will move the Commonwealth from paper-based files to EHRs. The move to EHRs will enable a patient-centered and appropriately secure system of health support. The goal of the eHealth program is for essentially all Massachusetts healthcare providers to use EHRs linked via a HIE. This will improve quality, as well as reduce errors and costs of healthcare, especially among underserved populations and geographic locations across the Commonwealth. A byproduct of this effort will include a de-identified data warehouse of health data useful for assessments, research, and policy development.

## 2. Members

The IT Mobilization Task Force has worked with a genuine spirit of collaboration and a keen sense of the importance and urgency of this effort. The Task Force conducted a rigorous process over a very short time to identify vital technology and eHealth projects. The table below shows the membership of the Task Force.

Name	Title	Agency / Organization
Margulies, Anne (Chair)	Assistant Secretary and Chief Information Officer	Information Technology Division
Montigny, Mark	State Senator	The Commonwealth of Massachusetts The 186th General Court – Senate
Sanchez, Jeffrey	State Representative	The Commonwealth of Massachusetts The 186th General Court – House of Representatives
Adams, Mitchell	Executive Director	Massachusetts Technology Collaborative
Benison, Marty	State Comptroller	Office of the Comptroller
Beveridge, John	Deputy Auditor	Office of the State Auditor
Bickerton, Bob	Associate Commissioner	Massachusetts Department of Elementary and Secondary Education
Boronski-Burack, Debra	President and Chief Executive Officer	Massachusetts Chamber of Business & Industry
Burlingame, Craig	Chief Information Officer	Administrative Office of the Trial Court

<sup>2</sup> At this writing, the Task Force had the opportunity to review the January 15 House of Representatives draft of the proposed Federal Act. Many of the projects identified in this report align closely with the initiatives specified in the draft bill. But because the proposed legislation is prescriptive and envisions making infrastructure investments through established formulas and existing channels, there is no discretionary money for the Governor to address other state priorities, including IT priorities, even though these would fully serve the jobs and economic objectives of the Federal Act. Nevertheless, the Task Force hopes that some of the Commonwealth’s other IT priorities captured in this report might be addressed through modifications to the legislation or through the ability to reallocate capital funds that may be freed up by stimulus grants in other areas.

Name	Title	Agency / Organization
Davies, David	Director of Information Technology, Division of Local Services	Department of Revenue
Day, Rosemarie	Deputy Director and Chief Information Officer	Commonwealth Health Insurance Connector Authority
Dougherty, Terry	Assistant Secretary for Administration and Operations	Executive Office of Health and Human Services
Frias, Valerie	General Counsel & Legislative Director	Office of Senator Mark Montigny
Fuller, John	Chief Information Officer	Executive Office of Transportation
Glennon, John	Chief Information Officer	Executive Office of Labor and Workforce Development
Gray, David	Chief Information Officer and Vice President of UMassOnline	University of Massachusetts
Grossman, John	Undersecretary of Forensic Sciences & Technology	Executive Office of Public Safety and Security
Hopcroft, Thomas	President and CEO	Mass. Technology Leadership Council
Horan, Mark	Executive Director	Massachusetts Network Communications Council
Jackson, Tito	Industry Director for IT	Mass Office of Business Development
Kelley, David B.	Executive Director	Massachusetts Colleges Online
Norman, Michele	Director of Strategic Planning and Collaboration	Executive Office of Education
Oates, Bill	Chief Information Officer	City of Boston
Wallace, David	Director, Division of Apprentice Training	Executive Office of Labor and Workforce Development
Wcislo, Celia	Assistant Director	1199 SEIU Massachusetts Division
Weber, Ken	Chief Administrative Officer	Executive Office of Transportation
Wilbur, Robert	Chief Information Officer	Executive Office of Energy and Environmental Affairs

While the Task Force itself is broadly representative, with members from every branch and most offices of state government, many others contributed to the effort by providing research and data needed to generate a sound set of projects proposed to the Governor for consideration.

### 3. Key Objectives for the Information Technology Task Force

The work of the Task Force centered on identifying projects that would strike an appropriate balance among the following objectives

- Federal Act objectives
  - Can begin within 180 days
  - Can be completed within 2 years
  - Creates jobs now and expands future job opportunities
- Governor's Guiding Principles
  - These guiding principles are inclusive of and based on the Federal Act objectives.
    - Invests for the long term
    - Limits impact on operating budgets (reduction or neutral)
    - Follows established infrastructure priorities
    - Diversifies funding and project benefits across industries and geography
    - Buys Massachusetts: To the extent possible, contract with Massachusetts contractors, purchase goods and services from Massachusetts companies, and hire Massachusetts people
- Commonwealth IT goals
  - Provides efficient and easily accessible services for all constituents
  - Promotes open and transparent engagement with citizens of the Commonwealth
  - Ensures accurate and timely data for policy making, service delivery, and results evaluation
  - Manages project risk and complexity at a reasonable level
- Secretariat/Branch/Agency priorities
  - Aligns with priorities of sponsoring agency
  - Is within ability of agency to execute based on capability and track record

These objectives were incorporated as part of the IT Task Force project database and are the recommended criteria for prioritizing projects. The IT Task Force used the criteria to develop a data driven process and tool to support their recommended process for an efficient, objective and fair prioritization of projects once the Federal Act is finalized.

In addition, objectives for the eHealth projects are:

- Increased patient safety
- Enhance the quality of care
- Decrease costs

These objectives are completely aligned with the goals of the “Act to Promote Cost Containment, Transparency and Efficiency in the Delivery of Quality Health Care” signed by Governor Patrick in August 2008.

## Governor's Guiding Principles

Guiding Principle	Description	Proposed IT Projects Will...	Proposed eHealth Projects Will...
Invest for the Long Term	All projects under this program should have a long-term benefit in addition to the stimulus effect of putting people back to work now	<ul style="list-style-type: none"> <li>Focus on 21st century "smart" services and processes</li> <li>Make state government more efficient, effective, accessible, transparent, and responsive for citizens and businesses</li> </ul>	<ul style="list-style-type: none"> <li>Create a state-wide Healthcare Data Warehouse (HDW) to enable collection of data for use in analyzing trends, case management, and reporting</li> <li>Provide a technical architecture that could connect to a national HIE</li> </ul>
Limit Impact on Operating Budgets	Prefer investments that will reduce – or at least not add to – demands on the operating budget	<ul style="list-style-type: none"> <li>Drive efficiency, and streamline operations</li> <li>Reduce or limit increases to operating budgets over the long term</li> </ul>	<ul style="list-style-type: none"> <li>Provide data for health monitoring efforts and quality improvement programs that create cost efficiency opportunities for state and private payors</li> <li>Reduce the occurrence and costs attributed to serious medication errors</li> </ul>
Follow Established Infrastructure Priorities	Make choices based on the infrastructure recommendations recently approved at the Development Cabinet	<ul style="list-style-type: none"> <li>Boost IT sector of Massachusetts economy</li> </ul>	<ul style="list-style-type: none"> <li>Boost both the IT and healthcare sectors of Massachusetts economy</li> </ul>
Diversify	Subject to whatever constraints there may be in the federal legislation, prioritize projects for funding in a manner that ensures funds will be allocated across a variety of industries and geographic locations	<ul style="list-style-type: none"> <li>Create "knowledge" jobs at all skill levels</li> <li>Reduce digital divide and democratize access to government services for all citizens</li> </ul>	<ul style="list-style-type: none"> <li>Involve State health agencies, public health departments, CHCs, and a variety of public and not-for-profit health organizations</li> <li>Enable health care organizations to isolate specific demographic pockets through analysis of community health data</li> <li>Create geographically dispersed jobs</li> </ul>

Guiding Principle	Description	Proposed IT Projects Will...	Proposed eHealth Projects Will...
Buy Massachusetts	To the extent possible, contract with Massachusetts contractors, purchase goods and services from Massachusetts companies, and hire Massachusetts people	<ul style="list-style-type: none"> <li>Draw on services of many technology companies either headquartered or with strong presence in the Commonwealth</li> </ul>	<ul style="list-style-type: none"> <li>Draw on the large concentration of software and hardware vendors with AEHR, CPOE, and HIE applications located in the Commonwealth</li> </ul>

#### 4. “Shovel-Ready” Projects

The Task Force utilized one approach for the IT projects and another for eHealth projects; the Task Force recommends use of these approaches for prioritizing projects. Because of the number and variety of the IT projects, it was necessary to build consensus across the project sponsors to identify projects and develop a prioritization process that can be used at a later date to quickly prioritize the portfolio of IT projects in a way that is fair and objective. To that end, the Task Force created a standard tool and a scoring methodology that it recommends using to prioritize projects. The recommended prioritization process for eHealth projects evolved from the work of the MeHI, HHS, and eHealth thought leaders from across the Commonwealth.

##### IT Projects

The Task Force developed a process for obtaining project recommendations from all of state government and for evaluating each candidate project according to the key objectives described earlier. The Task Force believes that this process has resulted in a balanced portfolio of high-impact projects that address a mix of needs and satisfy the range of objectives listed in Section 3.

To aid in the evaluation and priority-setting process, the Task Force developed:

- A web-based survey instrument to gather project proposals and data from all agencies
- A database to inventory projects and serve as a platform for analysis
- A scoring tool and numerical scale to assess alignment with key objectives

With these tools, the Task Force employed a data-driven, functional and flexible methodology to validate that projects will meet the Federal Act, Commonwealth, and agency goals. This prioritization process was expedited by the unprecedented collaboration among the task force members. As a result, these projects are ready to be prioritized for implementation, and the Task Force recommends utilizing its approach.

See *Appendix 2A – IT: Scoring System for IT Projects* for a detailed overview of the scoring tool.

##### eHealth Projects

Massachusetts has a wealth of thought leaders who have been collaborating to develop a Commonwealth-wide eHealth infrastructure. As a result, Massachusetts is uniquely positioned for eHealth innovation given health care reforms, the Chapter 305 of the Acts of 2008 legislation passed that created the governing body of the Massachusetts eHealth Institute, and the input from hospitals and other providers to implement these projects. These projects are indeed ready for execution and are able to quickly put funding to work, as it becomes available.

The IT Task Force's eHealth recommendations are the collaborative result of analyses by the Massachusetts eHealth Institute (MeHI) and the Executive Office of Health and Human Services (EOHHS). These organizations are described briefly below.

- MeHI is a division of the Massachusetts Technology Collaborative that was created by the Massachusetts legislature in 2008 to advance the dissemination of health IT across the Commonwealth. It is designed to provide a mechanism for mobilizing the deployment of EHRs in all physician settings state-wide, that are to be networked through a state-wide health information exchange (S-HIE). MeHI provides a state-wide organization and framework to ensure that all EHRs meet standards for applications and interoperability.
- EOHHS, the largest Commonwealth secretariat, focuses on improving the lives of Massachusetts residents. EOHHS provides a variety of programs and services for children, adults, and the elderly. In addition, EOHHS pursues health care research as well as ways to improve the accessibility of health care services.

Each bringing their unique perspectives, MeHI and EOHHS developed joint recommendations to identify and accelerate the deployment of eHealth. This partnership also drew recommendations from many organizations with an eHealth focus in the Commonwealth, including:

- Massachusetts Health Data Consortium (MHDC);
- New England Healthcare EDI Network (NEHEN);
- Massachusetts Simplifying Healthcare Among Regional Entities (MA-SHARE), and;
- Massachusetts eHealth Collaborative (MAeHC).

MeHI and EOHHS will jointly facilitate the interoperability of the projects selected; a critical factor in optimizing the value of each individual effort and the overall value of the Commonwealth's eHealth program.

## 5. Projects

### IT Projects

The IT project portfolio recommended by the Task Force comprises a vast array of initiatives across all branches and virtually all agencies of state government. Among these initiatives, there are important technology projects that will:

- Provide innovative services to citizens and businesses
- Enhance education, public safety, and economic development
- Connect disparate databases for more effective analysis, planning, and evaluation
- Streamline government operations

The following table summarizes the IT projects:

IT Project Summary		
Secretariat or Constitutional Office	Total Project Count	Total Federal Act Request (\$)
Administration and Finance	42	\$296,758,226
Education	14	\$166,310,000
Energy and Environmental Affairs	37	\$78,885,000

IT Project Summary		
Secretariat or Constitutional Office	Total Project Count	Total Federal Act Request (\$)
Health and Human Services	31	\$101,981,028
Housing and Economic Development	12	\$2,351,000
Independent Offices and Commissions	5	\$6,500,000
Judiciary	11	\$11,076,434
Labor and Workforce Development	9	\$26,230,000
Massachusetts District Attorney Association	3	\$1,315,000
Office of the Comptroller	3	\$26,500,000
Public Safety	9	\$185,150,000
State Auditor	1	\$6,562,300
Transportation and Public Works	15	\$64,310,000
Treasurer and Receiver General	2	\$1,500,000
<b>TOTAL</b>	<b>194</b>	<b>\$975,428,988</b>

See the *Project List* for a detailed list of the projects.

Each project has a specific plan (captured in the IT Task Force database) that estimates both state worker and contractor job requirements. Additional contractor jobs will be created through the establishment of an outsourced Project Management Office (PMO) within ITD that will oversee project execution, monitoring, and reporting across all initiatives.

### eHealth Projects

The following four eHealth projects have been jointly selected by MeHI and EOHHS, and constitute the eHealth projects portfolio recommended by the IT Task Force:

- *Ambulatory Electronic Health Record (AEHR)* – Deploy AEHR in 13,000 individual physician practices throughout the Commonwealth;
- *Computerized Physician Order Entry (CPOE)* – Deploy CPOE systems in the 63 acute care hospitals throughout the Commonwealth that still do not have CPOE or one fully implemented;
- *Community Health Centers (CHCs)* – In the Commonwealth, there are CHCs that do not have an EHR or one fully implemented. This project includes deploying an EHR in the 12 CHCs, as well as implementing a central clinical data repository (CDR) for the CHCs; and
- *Health Information Exchange (HIE)* – In parallel with the general deployment of EHRs in the prior three care-delivery settings (individual physician practices, acute care hospitals, and CHCs), deploying a state-wide health information exchange (S-HIE) that will support the secure sharing of patient information among the care-delivery settings where new EHRs are being implemented and the care settings that already have EHRs. This project also includes the deployment of a state healthcare data warehouse (HDW) that will aggregate de-identified patient data for the purposes of bio-surveillance and quality/outcome measurement.

Individually, each project offers specific value to the State Legislature, government health agencies, care providers, and the people of Massachusetts. Combined, the four projects contribute a powerful

combination of benefits that will significantly assist the Commonwealth in achieving its goals of improved patient safety, reduced health care costs, and enhanced coordination of care.

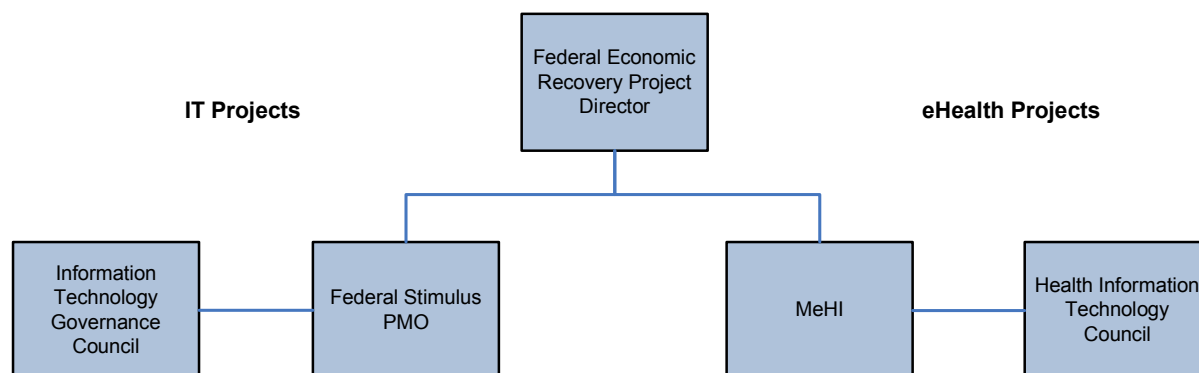
The following table summarizes the eHealth projects:

eHealth Projects		
Project	Total Project Count	Total Federal Act Request (\$)
Ambulatory Electronic Health Records (AEHR)	1	\$340,000,000
Computerized Physician Order Entry (CPOE)	1	\$125,000,000
Community Health Center EHRs (CHC)	1	\$13,000,000
State-level Health Information Exchange (S-HIE)	1	\$35,000,000
<b>TOTAL</b>	<b>4</b>	<b>\$513,000,000</b>

See the *Project List* for a detailed list of the projects.

## 6. Agency Staffing Plans

The oversight, governance and contract/vendor management for the final selected IT and eHealth projects will be managed by the Commonwealth. A clear governance structure can quickly be established to support monitoring and accountability of the IT and eHealth projects.



Effective Project Management includes implementing protocols, templates, and tools based on generally accepted best practices to standardize the project activities. There are many areas that will require oversight, including: governance, scope management, work plan and milestone management, risk management, issue management, quality management, communications, and reporting and financial performance management.

### IT Projects

The following table provides a summary snapshot of the staffing needs discussed in more detail throughout this section.

IT Projects	
Secretariat or Constitutional Office	Federally funded FTE Request Based on Agency Staffing Analysis



IT Projects	
Secretariat or Constitutional Office	Federally funded FTE Request Based on Agency Staffing Analysis
Administration and Finance	245
Education	79
Energy and Environmental Affairs	106
Health and Human Services	247
Housing and Economic Development	14
Independent Offices and Commissions	14
Judiciary	9
Labor and Workforce Development	31
Massachusetts District Attorney Association	10
Office of the Comptroller	47
Public Safety	34
State Auditor	10
Transportation and Public Works	81
Treasurer and Receiver General	4
<b>TOTAL</b>	<b>931</b>

Each IT project has a specific plan (captured in the IT Task Force database) that includes estimates of state workers that will be needed to support these projects. This number of internal agency jobs is a best estimate at this time and may include some reallocation of existing personnel.

### eHealth Projects

For the eHealth projects, MeHI will be adding a few resources to augment their current staff to strengthen the program management office. These additional resources are not expected to be funded through the Federal Act. At this time, EOHHHS does not anticipate adding any staff as existing staff will be leveraged to support the four eHealth projects.

## 7. Barriers and Obstacles to Achieve Objectives

The IT Task Force identified five key challenges that will be addressed to ensure successful execution of the IT and eHealth projects:

- Lengthy recruitment and hiring process
- Fragmented and slow procurement process
- Ineffective project management
- Inadequate governance and oversight
- Resistance to technology and business process change

- The table below outlines the major obstacles anticipated and the corresponding mitigation strategies planned. A significant amount of planning and design work has already been accomplished, and most remediation strategies have already been completed or are under way. For this reason, the Task Force believes that these projects are truly “shovel-ready.”

		Mitigation Strategy / Actions Required	
Barrier / Obstacle	Solution	IT Projects	eHealth Projects
Lengthy recruitment and hiring process	Streamline recruitment of qualified workers and contractors	<ul style="list-style-type: none"> <li>• Create centralized recruitment team and portal to develop candidate pool for agency-based projects</li> <li>• Optimize recruitment pipelines via partnerships with Year Up program and UMass</li> <li>• Develop streamlined onboarding process to make new hires productive in less than two weeks of start date</li> </ul>	<ul style="list-style-type: none"> <li>• Create processes to streamline hiring staff of implementing organizations</li> <li>• Ensure appropriate support is in place for a successful execution of projects</li> </ul>
Fragmented and slow procurement process	Maximize economies of scale; streamline processes while preserving fair, open, and competitive procurement  <i>See the Procurement Taskforce Section for more details.</i>	<ul style="list-style-type: none"> <li>• Create specialized Procurement Speed Teams</li> <li>• Develop RFQ and RFR templates to simplify and standardize the procurement process</li> <li>• Use established state contractors where possible to avoid lengthy RFR and contracting processes</li> </ul>	<ul style="list-style-type: none"> <li>• Simplify procurement processes for implementing organizations</li> <li>• Leverage expedited procurement processes that will be established</li> </ul>
Inadequate governance and oversight	Establish appropriate governance structures	<ul style="list-style-type: none"> <li>• Manage projects at the source, in sponsoring agencies</li> <li>• Establish overarching Project Management Office (PMO) to standardize management disciplines across projects (Note: RFQ for PMO already written)</li> <li>• Employ industry best-practices to monitor projects and hold project</li> </ul>	<ul style="list-style-type: none"> <li>• Launch Health Information Technology Council as defined in C305 legislation.</li> <li>• Create (and test) a PMO responsible for organizing and monitoring the eHealth projects procurement and implementation activities.</li> <li>• Establish Data Governance structure that clearly articulates points of data</li> </ul>

		Mitigation Strategy / Actions Required	
Barrier / Obstacle	Solution	IT Projects	eHealth Projects
		managers accountable <ul style="list-style-type: none"> <li>• Convene broad-based oversight/governance group that builds on the success of the Task Force</li> </ul>	transmission. <ul style="list-style-type: none"> <li>• Establish a data exchange partnership among stakeholders to nurture “a chain of trust” relationship among the key groups</li> </ul>
Resistance to technology and business process change	Institute an effective change management process	<ul style="list-style-type: none"> <li>• Establish clear vision to obtain stakeholder buy-in during planning and implementation of projects</li> <li>• Provide training and change management tools to facilitate the transition of end users to new systems and business processes</li> </ul>	<ul style="list-style-type: none"> <li>• Conduct outreach and communication strategies</li> <li>• Educate healthcare practitioners on the benefits of the proposed projects and foster cultural sensitization</li> <li>• Develop change management plans focused on communicating to physicians how they will integrate the new technology, and clearly communicate expectations about the initiative.</li> </ul>

## 8. Metrics for Measuring Success

Each individual project has specific milestones and measures of success, as recorded in the IT project database. In addition, success shall be further ensured by:

- Coordinating all IT and eHealth project work with the Federal Economic Recovery Project Director,
- Making all work transparent and accountable; plans are in place to create an open, web-based “dashboard” to show progress throughout the project implementation process,
- Establishing a professional Project Management Office to support and to monitor all initiatives across the entire portfolio of projects, and;
- Using the governance structures already in place via the eHealth Institute and the Health Information Technology Council to have oversight of the projects and to approve plans for the eHealth Projects.

### **The Importance of Investing in Information Technology and eHealth Projects**

The Federal Act offers a unique opportunity for the Commonwealth to make unprecedented investments in the future through its IT and eHealth infrastructure. The projects put forth by the IT Task Force not only fulfill the stimulus objective of creating immediate jobs that will boost the state's economy, but they also offer long-term and profound impacts on the quality of state government, on the lives and health of our citizens, and on the economic development of the Commonwealth. These projects should be adapted to the greatest extent possible consistent with the final parameters of the Federal Act.<sup>3</sup>

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<sup>3</sup> As the Federal Act is finalized, the governing structure of the IT projects may need to be reconsidered. Additionally, the eHealth projects may need to be restructured to align with the requirements outlined to qualify for more funding.

## Municipal Task Force

### 1. Introduction

Cities and towns play an essential role in the administration of government services, distribution of state money and in fostering broad ranging economic growth. Many of the most essential services, schools, water and energy, are administered at the local level. For these reasons, the Municipal Facilities Task Force is a critical part of the overall, Commonwealth-wide effort resulting from the Federal Act.

Recognizing the unique importance municipal success plays in the Commonwealth's stability, the Municipal Facilities Task Force contacted cities and towns and requested ready-to-go municipal projects that might be eligible for federal funding under the Federal Act. To this end, and in an effort to give municipalities a voice in the planning process for the potential federal funds, the Municipal Facilities Task Force e-mailed mayors, city and town managers in all 351 cities and towns across the Commonwealth. This e-mail requested that cities and towns review the needs of their community and determine whether or not they have projects that might be eligible for funding. The e-mail mentioned projects such as wastewater plants, water plants, public safety facilities, libraries, city and town halls/buildings, and recreation facilities, but did not limit the responses to just these types of projects. In addition, the e-mail informed cities and towns that any submissions to the Municipal Facilities Task Force that did not fall into our purview would be distributed to the other task forces at the appropriate time. Because the Task Force did not know the exact Federal criteria for the type of projects that may qualify and those that may not at the time of our request, the only restrictions the Task Force gave municipalities were that the projects must be "shovel-ready" within 180 days (of enactment of the Federal Act) and completed within two years.

In response to the e-mail, the Task Force received over 4,600 project submissions totaling more than \$16 billion dollars from almost every city and town in Massachusetts. These requests ranged from projects that cost a few thousand dollars and create a few jobs to multi-million dollar projects that would create hundreds of jobs. This exercise has highlighted just how much funding cities and towns need in order to address their capital challenges.

### 2. Members

The Municipal Facilities Task Force consisted predominantly of local elected officials from across the Commonwealth, but it also included representatives from the State Senate and the State House of Representatives, town managers, staff from the Massachusetts Municipal Association and a few Administration employees who work with cities and towns in their professional capacity.

Name	Title	Agency / Organization
Murray, Timothy	Lt. Governor, Task Force Chair	Commonwealth of Massachusetts
Baier, David	Legislative Director	Massachusetts Municipal Assoc.
Belanger, Doug	Selectman	Town of Leicester
Brennan, Timothy	President	MA Association of Planning Orgs.
Carr, Ted	Selectman	Town of Cohasset
Curtatone, Joseph	Mayor	City of Somerville
Dolan, Robert	Mayor	City of Melrose
Donato, Paul	Representative	House of Representatives

Name	Title	Agency / Organization
Dumas, Kevin	Mayor	City of Attleboro
Dunlavy, Linda	Executive Director	Franklin Regional Council of Governments
Gaumond Jr., Leon	Town Administrator	Town of West Boylston
Haas, Glenn	Assistant Commissioner	Dept. of Environmental Protection
Higgins, Mary Clare	Mayor	City of Northampton
Jordan, Scott	Executive Director	Water Pollution Abatement Trust
Laskey, Fred	Executive Director	MA Water Resources Authority
McCurdy, Steven	Manager, State Revolving Fund Program	Massachusetts Department of Environmental Protection
Nunes, Robert	Deputy Commissioner	Department of Revenue, Division of Local Services
Nutting, Jeffrey	President	Massachusetts Municipal Assoc.
Ruberto, James	Mayor	City of Pittsfield
Robertson, John	Deputy Director	Massachusetts Municipal Assoc.
Rosenberg, Stanley	Senator	MA State Senate
Scanlon, William	Mayor	City of Beverly
Siegal, Dina	Deputy Director, Mayor's Office of Intergovernmental Relations	City of Boston
Sullivan, Richard	Commissioner	Dept. of Conservation and Rec.
Tobey, Bruce	Past President	Massachusetts Municipal Assoc.
Valente, Maureen	President	MA. Municipal Managers Association/Sudbury
Vanderhoef, Sheila	Town Administrator	Town of Eastham

### 3. Key Objectives for the Municipal Facilities Task Force

The Patrick-Murray Administration considers local elected officials and other municipal representatives partners in all of their efforts to improve the Commonwealth and the lives of Massachusetts residents. With this in mind, the Task Force set out to gather projects relating to the critical services cities and towns provide to Massachusetts residents on a daily basis, recognizing that municipalities are as, if not more, impacted by our current fiscal challenges as the Commonwealth and federal governments.

In collecting information about projects, the Task Force sought to determine the breadth and depth of ready-to-go efforts underway and needed at the local level. The high volume of responses to our request for projects underscores the intense immediate need in municipalities. This effort made clear not only the fact that municipalities face great challenges regarding their water, public works, roads and public safety projects, but also the fact that cities and towns are centers of innovation in the Commonwealth as many projects were forward looking regarding energy, information technology, and economic development programs.

## Governor's Guiding Principles

The majority of the projects that were submitted to the Municipal Task Force align with one or more of the Governor's Guiding Principles. In addition to the volume of projects, the projects reviewed by the Municipal Facilities Task Force are different than those reviewed in other task forces in their scale and administration. Many cities and towns submitted deferred maintenance projects. Rather than large programmatic initiatives, they are looking to fill lingering and immediate needs, some of which will create many jobs, while others create very few. It is the belief of the Municipal Facilities Task Force that these projects are no less important because of their smaller scale, and in fact, many of them enhance the ability to provide the geographic diversity of spending that might not result from the projects submitted by other task forces.

Guiding Principles	Description
<b>Invest for the Long Term</b>	Municipal projects are by nature a long term investment because the funding will address critical infrastructure needs now and allow the city or town to avoid worsening structures that will cost more to repair and possibly allow them to avoid a property tax increase to pay for these critical projects.
<b>Limit Impact on Operating Budgets</b>	Cities and towns are very sensitive to adding cost to their operating budgets and successfully developed project proposals that have little or no impact on operating budgets.
<b>Follow Established Infrastructure Priorities</b>	All of the projects received accomplish one or more of the Development Cabinet's priorities of job creation, promotion of clean energy use, development in Gateway cities, etc.
<b>Diversify</b>	Funding a wide range of municipal projects across the Commonwealth will ensure that funds will be allocated across a variety of industries and geographic locations.
<b>Buy Massachusetts</b>	To the extent possible, cities and towns have expressed the desire to contract with Massachusetts contractors, purchase goods and services from Massachusetts companies, and hire Massachusetts people.

## Task Force Guiding Principles and Objectives

The Municipal Facilities Task Force understand that the Federal Act will not allow the Commonwealth to fund all of the projects submissions the Task Force received and is particularly focused on rapid job creation. Each of these projects is important to the jurisdiction from which it came and many have benefits to expand at the regional and even Commonwealth level. As the Federal Act further defines readiness and criteria for selection, the Task Force anticipates a need to review the list to ensure that all of the projects meet the 180-day "shovel-ready" and other federal requirements.

Although the Municipal Task Force has not prioritized projects, the Task Force agreed on a number of criteria that should be considered when prioritization takes place. The criteria are as follows:

Guiding Principles and Objectives	Description
<b>Shovel-Ready in 180 Days</b>	<ul style="list-style-type: none"> <li>Construction is able to begin 180 days from enactment of the Federal Act. Expected enactment—mid-February. Design and permitting need to be complete at this time or at least far enough along that it allows for construction to begin.</li> </ul>

Guiding Principles and Objectives	Description
<b>Promotes Regionalization</b>	<ul style="list-style-type: none"> <li>Acknowledging the tremendous work already conducted through the Gateway Cities and other regional development programs, projects that enhance regional goals are highly regarded.</li> </ul>
<b>Involves a Range of Trades/Industries</b>	<ul style="list-style-type: none"> <li>In an effort to ensure workforce coverage, projects that call for a diverse range of workforce needs should be promoted.</li> </ul>
<b>Earmarked in a Bond Bill</b>	<ul style="list-style-type: none"> <li>The Legislature and Administrative branches have already reviewed and prioritized projects within the 7 bond bills. This criterion should be used after a project passes all of the other criteria.</li> </ul>
<b>Leverages Other Sources of Funding</b>	<ul style="list-style-type: none"> <li>If the Federal Act calls for a match, this criterion should be used.</li> </ul>
<b>Creates Jobs</b>	<ul style="list-style-type: none"> <li>Other than the 180-day requirement, the creation of jobs is the most critical criteria. The more jobs, the better. If all of the requested projects were funded, the Task Force estimates that between 135,000 and 210,000 jobs would be created.</li> </ul>
<b>Commonwealth Capital Score</b>	<ul style="list-style-type: none"> <li>Because SmartGrowth and other urban development/land use goals are important to the sustainable growth of the Commonwealth, measures such as the Commonwealth Capital score are an important criteria guiding our taskforce.</li> </ul>

#### 4. “Shovel-Ready” Projects

Due to the high number of submissions the Municipal Task Force received, the Task Force has not prioritized projects. Instead, the Task Force categorized them by municipality. The Task Force also provided projects that fall under the jurisdiction of other task forces to those groups for consideration. In terms of projects outside of the jurisdiction of the Municipal Task Force, many will be forwarded on to the Transportation Task Force. The remaining non-municipal projects are divided up mainly between the Energy and Educational Facilities Task Forces. For ease of tracking and for the purposes of this report, projects submitted to the Municipal Task Force that fall under the jurisdiction of another taskforce, will be maintained in Municipal Task Force project list. During the process of future prioritization, projects falling under the jurisdictions of other task forces will be prioritized within those task force lists, while projects subject to the purview of the Municipal Facilities Task Force only will be prioritized in the Municipal Facilities Project List.

The House version of the Federal Act shows funding flowing through already-established funding formulas at the state and federal levels, meaning that already established criteria will be used to distribute this additional funding. Unfortunately, if the final version of the bill resembles the version approved by the House Appropriations Committee January 21, 2009, a flexible pool of funding may not be available for projects that fall outside of existing state or federal programs and funding channels. The Task Force received hundreds of project requests for construction or rehabilitative work on city and town buildings that would go unfunded under the current bill. This is of great concern to the Municipal Facilities Task Force and as a result the Task Force recommends additional flexible funding be made available.

If flexible funds are indeed made available, the Task Force will use the guiding principles described above to prioritize projects. Projects will first have to meet the federal criteria and then the Governor's Guiding Principles. Finally, the Municipal Task Force's criteria will be applied. The last part of the criteria will be to consider geographic diversity and inclusion in a bond bill.



For the projects that fall specifically in the Municipal project list, the Task Force categorized projects by type:

- City or town buildings
- Library
- Municipal garages
- Nursing Homes
- Other/Dredging
- Public safety
- Recreation
- Wastewater/Water/Sewer

Almost half of the municipal projects the Task Force received fall into the wastewater/water/sewer category. When it is time to prioritize, projects should be judged within their category and not cross-category. Again, this should take place if there is funding available for these types of projects.

The Municipal Task Force recommends that projects be selected in the most fair and equitable way possible. The Task Force is concerned that certain communities that do not have ready-to-go projects sitting on the shelf, but with as much need as other communities, will miss out on federal funds. Certainly, the Task Force promotes regional geographic diversity, but the issue of equity and fairness is more than that. That said, the Task Force acknowledges the need to see the final bill to determine how to best achieve this within the guidelines of the Federal Act.

It is important to note the challenges the Task Force had in collecting and organizing information received from municipalities. In our effort to move quickly before the Federal Act was filed, the Task Force contacted municipalities and casted a wide net to bring in any project that might fit the guidelines of the anticipated bill. This resulted in the submission of over 4,600 projects that were submitted in different formats (Word documents, Excel spreadsheets, PDF files) that the Task Force continues to organize. The Task Force developed a computer code that could read the word documents submitted and automatically enter the information from specified fields into an Excel spreadsheet. While certainly a helpful tool, it is still imperfect. The list of projects represents what this process could extract so the Task Force does expect some potential omissions. For this reason and in an effort to better understand municipal priorities, the Task Force emailed the cities and towns to request that they prioritize their top 3 projects and prepare to provide us with additional information that the Task Force now knows it needs considering the guidelines of the Federal Act. The Task Force has made clear that all of submitted projects will be considered regardless of their priority status, but it will be useful for to see what the municipalities' highest priorities are given the volume of submissions. In this e-mail the Task Force stressed the need for projects to be "shovel-ready" within 180-days, as well as the federal request that these projects create jobs.<sup>4</sup> Additional vetting must be done to determine what projects meet these two basic criteria. The Task Force will go back to cities and towns to retrieve this information once we determine what funding is available for municipal projects outside of the already established formulas.

## 5. Agency Staffing Plans

By its nature, projects that are funded will require administrative and project support at the local and state levels. It is not a question of whether or not municipalities and state agencies will need support, but rather how much. It is becoming clear that programs like the State Revolving Fund (SRF) may

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<sup>4</sup> See *Section I – Executive Summary* for an explanation of the job creation methodology used by the Municipal Task Force.

need additional resources if they are asked to reach out to cities and towns to request more projects to fund with the stimulus funding. It is not fully apparent whether they will need to do so, but we should be prepared to support the SRF. Demands on the SRF also potentially impose demands on the Water Pollution Abatement Trust; the trust anticipates almost a 50% increase in applications as a result of projects submitted to the Municipal Task Force.

In terms of managing the funding from the Federal Act that affects municipalities, funds that flow through already established formulas and programs will have a minimal impact on state agencies. If there are funds that need to be administered outside of already established programs, the burden on state agencies will increase.

Beyond administration, it is clear that there will be an influx in permitting requests at both the local and state level. The Department of Environmental Protection (DEP), anticipates an enormous influx of permitting requests, which if “use it or lose it” provisions apply, may require particularly expeditious processing. It is the understanding of this task force that the demands on DEP have been discussed and plans developed under the supervision of the Permitting, Workforce, and other cross-cutting task forces, and are sufficiently addressed elsewhere in this report.

Finally, depending on how much funding is distributed to cities and towns and in what manner, cities and towns may need assistance in administering the funds or permitting to get projects started at the requested time.

## 6. Barriers and Obstacles to Achieve Objectives

As described elsewhere in this report, the administration of municipal projects is unique. Some of these unique features may create barriers when an abnormally large volume of projects is introduced into what are normally streamlined and fairly constrained channels. Such barriers are described in greater detail in the table below.

Barrier / Obstacle	Mitigation Strategy / Actions Required
<b>State Revolving Fund—need legislation to accommodate more flexible subsidies in federal bill</b>	<ul style="list-style-type: none"> <li>The Water Pollution Abatement Trust and MassDEP have prepared corrective legislation for filing. Projects will need to be on the SRF Priority Lists and MassDEP is working with USEPA on necessary fine tuning to the Priority Lists that MassDEP is in the process of evaluating.</li> </ul>
<b>Permitting (Local and State)</b>	<ul style="list-style-type: none"> <li>Working with Permitting Task Force to address this issue.</li> </ul>
<b>Private Workforce Needs</b>	<ul style="list-style-type: none"> <li>Working with Workforce Task Force to address this issue. The Municipal Task Force recommends making an effort to select projects that employ a diverse range of workers so we can spread out the employment opportunities among the trades.</li> </ul>
<b>Town Approval Process</b>	<ul style="list-style-type: none"> <li>Municipalities have different mechanisms for approving projects or spending. Towns in particular have a difficult time because they may have to bring the project before town meeting to get it approved.</li> </ul>
<b>Favoring of Certain Municipalities</b>	<ul style="list-style-type: none"> <li>Again, towns and smaller cities may be disadvantaged because they have fewer “shovel-ready” projects on the shelf. To address this, we have made geographic diversity a factor in the prioritization process.</li> </ul>

For more information on Permitting, Procurement and Workforce, please see *Section III, Cross-Cutting Task Force Overview*.

## 7. Metrics for Measuring Success

### Metrics

There are a number of ways the Municipal Task Force anticipates measuring success. In general, these measures relate to the criteria used for prioritizing and selecting projects in the first place. Additionally, many of the federal and state channels anticipated to designate and control funding contain existing provisions for measuring success. The Task Force anticipates that in addition to the specific measures described below, additional federal and state metrics will be applied to measure project effectiveness as well.

Metric	Description	Method for Monitoring/Measurement
<b>Geographic Diversity</b>	<ul style="list-style-type: none"> <li>Projects spread throughout the Commonwealth.</li> </ul>	<ul style="list-style-type: none"> <li>Evaluating the number of projects funded through the Federal Act and where they are located.</li> </ul>
<b>Funding Released in a Timely Manner</b>	<ul style="list-style-type: none"> <li>The Commonwealth, when appropriate, will have to disseminate this funding and should do so in a timely manner that allows cities and towns to start work on time.</li> </ul>	<ul style="list-style-type: none"> <li>This will depend greatly on the final bill and what guidelines are given to the states.</li> </ul>
<b>Project Started on Time</b>	<ul style="list-style-type: none"> <li>The project is started within 180 days of enactment of the Federal Act.</li> </ul>	<ul style="list-style-type: none"> <li>Evaluate when projects received money and when they break ground.</li> </ul>
<b>Project Completed on Time</b>	<ul style="list-style-type: none"> <li>Projects must be completed in 2 years of their start date.</li> </ul>	<ul style="list-style-type: none"> <li>Measure whether projects are completed within 2 years. Projects should be completed by 2011.</li> </ul>
<b>Project Completed within Budget</b>	<ul style="list-style-type: none"> <li>Additional state money will not be available to municipalities if they go over budget</li> </ul>	<ul style="list-style-type: none"> <li>Program staff will work with municipalities to help keep projects on track and on budget</li> </ul>
<b>Number of Jobs Created</b>	<ul style="list-style-type: none"> <li>The primary goal of the Federal Act is to create jobs—the more the better.</li> </ul>	<ul style="list-style-type: none"> <li>Request information from cities and towns about expected and actual employment both short and long term.</li> </ul>

## Private Development Task Force

### 1. Introduction

The charge of the Private Development Task Force has been to identify public investment opportunities that directly support private economic development activity.

The Task Force membership included: (1) representatives of the Administration and of the Legislature associated with housing and economic development; (2) representatives of the Commonwealth's quasi-public agencies associated with housing and economic development; and (3) private sector representatives, including trade and industry group representatives.

After several meetings, the Task Force recommends project-specific public investments that total \$1.593 billion in the following areas<sup>5</sup>:

- Traditional public infrastructure projects in locations supporting planned commercial/residential private development
- Affordable housing developments unable to proceed due to lack of tax credit investors or other financing gaps

The Task Force also recommends programmatic public investments of \$1.979<sup>6</sup> billion in the following areas:

1. Broadband Connectivity Funding
2. Renewable Energy in Private Buildings Funding
3. MassDevelopment Non-Profit Facilities Fund
4. MassDevelopment General Business Viability Fund
5. MassInvest – Micro-Loan and Small Business Lending Retention Fund
6. Life Sciences Center Funding
7. Clean Energy Center Funding
8. Recapitalization of John Adams Innovation Institute
9. Foreclosed Properties Rehabilitation Fund

Given the charge of the Private Development Task Force, and the time constraints of the exercise, the primary objective of the Task Force was to systematically identify possible projects and programs that would effectively support private economic development activity. Because of the unique charge of the Private Development Task Force, many nominations for projects were made by parties who were not themselves the project proponents. For this reason, much of the information expected to be collected through the Task Force exercise was not immediately available.

The Task Force is highly confident that the exercise has generated a comprehensive listing of the projects and programs that should be further examined for their effectiveness in supporting private economic development activity. The members of the Task Force have been actively engaged in the process and strongly desire to continue to participate in the next step in the process, which for this Task Force will be to systematically and consistently apply development readiness and prioritization criteria to the nominated projects.

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<sup>5</sup> In addition, the Task Force received 189 additional project submissions totaling \$1.603 billion.

<sup>6</sup> The \$1.979 billion in programmatic public investments is not included on the *Project List* and the total dollars for these programs are not included in the Total Federal Act Request with the *Executive Summary*, which only includes projects.

## 2. Members

Name	Title	Agency / Organization
O'Connell, Daniel	Secretary; Task Force Chair	Executive Office of Housing & Economic Development
Anderson-Lamoureux, April	Director & State Permitting Ombudsman	MA Permit Regulatory Office
Arce, Pedro	President & CEO	Veritas Bank
Begelfer, David	CEO	National Association of Industrial & Office Properties – MA Chapter
Bialecki, Gregory	Undersecretary	Department of Business Development
Bickerton, Robert	Associate Education Commissioner	Executive Office of Education
Boronski-Burack, Debra	President	MA Chamber of Business & Industry
Bosley, Daniel	Representative	MA House of Representatives
Brooks, Tina	Undersecretary	Department of Housing & Community Development
Cloney, Patrick	Executive Director	MA Office of Business Development
Cotter, Kevin	Business Manager	Local 12 Plumbers Union
Crane, Daniel	Undersecretary	Office of Consumer Affairs and Business Regulation
Culver, Bob	President & CEO	MassDevelopment
d'Aberloff, Nick	President	NE Clean Energy Council
Doherty, Richard	President	Association of Independent Colleges and Universities in MA
Dougherty, Terry	Assistant Secretary for Finance & Fiscal Policy	Executive Office of Health & Human Services
Draisen, Mark	Executive Director	Metropolitan Area Planning Council
Erich, Mark	Senior Assistant Administrator/ Organizing Director	NE Regional Council of Carpenters
Gleason, Tom	Director	MassHousing Authority
Guidice, Phil	Commissioner	Division of Energy Resources
Haynes, Bob	President	AFL-CIO of MA
Homer, Ron	President	Access Capital Strategies

Name	Title	Agency / Organization
Houston, Susan	Executive Director	MA Alliance for Economic Development
Hunter, Michael	Director, Business Resource Team	Department of Business Development
Jamele, Bryan	Policy Advisor	Executive Office of Housing & Economic Development
Linde, Ed	CEO	Boston Properties
McGee, Stan	Assistant Secretary for Policy & Planning	Executive Office of Housing & Economic Development
Mullan, Jeff	COO	Executive Office of Transportation & Public Works
Nakajima, Eric	Senior Policy Advisor	Executive Office of Housing & Economic Development
Noel, George	Director	Department of Labor
Porter, Andre	Executive Director	Office of Small Business & Entrepreneurship
Richards, Lowell	Director of Port Planning & Development	MassPort
Robertson, Jeff	Deputy Director	MA Municipal Association
Silva, Edith	Executive Director	State Office of Minority & Women Business Assistance
Smith, Rob	Director of Policy & Planning	Executive Office of Labor & Workforce Development
Wall, Betsy	Executive Director	MA Office of Travel & Tourism
Walsh, Melissa	COO	MA Life Sciences Center
Warwick, Kyle	Managing Director – Investment Development	Jones Lang LaSalle
Windham-Bannister, Susan	President & CEO	MA Life Sciences Center
Ziegler, Clark	Director	MA Housing Partnership

### 3. Key Objectives for the Private Development Task Force

Public investments in support of private economic development activity offer a unique opportunity to provide a direct economic stimulus and to have an indirect multiplier effect by: (a) in some cases, immediately triggering other private construction activity undertaken with private funds, (b) in other cases, preparing locations for private construction activity at the earliest possible time on the upside of the economic cycle, and (c) in all cases, addressing critical impediments to long-term private economic development activity in the Commonwealth.

All of the project areas and programs recommended by the Task Force align with the five basic principles outlined by Governor Patrick in his directions for mobilization. Further information on how such alignment is achieved is contained in the specific descriptions of the project areas and programs.

Since the priority principles established by the Development Cabinet (see *Appendix 1* for a list of these priorities) directly relate to the recommended public investment in traditional public infrastructure, those are considered by the Task Force as the guiding principles for this project area, without the need for additional criteria.

For the other recommended project areas and programs, the Task Force recommends additional criteria as well, as further outlined in the specific descriptions of the project areas and programs.

### Governor's Guiding Principles

The following describes how the recommended projects align with the Guiding Principles outlined by Governor Patrick:

Guiding Principles	Description
<b>Invest for the Long Term</b>	All recommended projects will qualify as long-term investments in that they will increase long-term job growth or housing growth in the Commonwealth.
<b>Limit Impact on Operating Budgets</b>	All recommended projects will either be operated and maintained within the anticipated operating budgets of the public project proponents or will be privately maintained.
<b>Follow Established Infrastructure Priorities</b>	All recommended projects will be scored in accordance with these priorities and will meet the standard established by the Development Cabinet.
<b>Diversify</b>	The recommended projects will be prioritized to assure industry and geographic diversity.
<b>Buy Massachusetts</b>	This principle will be followed to the extent allowable.

### Task Force Guiding Principles and Criteria

Guiding Principles and Criteria	Description
<b>Maximize Immediate Employment Opportunities</b>	Among otherwise equally qualified and prioritized projects, prefer projects that create the maximum amount of immediate employment opportunities
<b>Maximize Housing Unit Creation</b>	Among otherwise equally qualified and prioritized housing projects, prefer projects that create the maximum number of housing units
<b>Maximize Private Funding Leverage</b>	Among otherwise equally qualified and prioritized projects, prefer projects that leverage the maximum amount of other public/private funding

## 4. “Shovel-Ready” Projects

As noted above, the Task Force has not prioritized the projects using the objectives described above. The intended process from here is as follows:

- A. Determine for each project whether there is a ready, willing and able project proponent.
- B. If so, determine for each project whether it has been fully designed and permitted and whether all needed site control/right of way has been acquired (or whether these steps could be completed within 90 days).
- C. If so, determine for each project whether it meets the infrastructure priority standard established by the Development Cabinet.
- D. If so, prioritize projects based on the additional Task Force criteria.

## 5. Projects

### Projects

For a detailed list of projects provided by the Private Development Task Force please see *Section IV – Project List*.

### Program Initiatives

#### 1) Broadband Connectivity Funding – \$200 million

##### *Overview*

Increased broadband availability will enhance the Commonwealth’s competitive position in vital sectors of the economy and improve the health, safety, education, and quality of life for the citizens of Massachusetts. Broadband access has a proven track record of stimulating economic growth, creating jobs, and increasing property values and tax receipts. Under the leadership of the Massachusetts Broadband Institute (the “Broadband Institute”), strategic and targeted public investments in broadband infrastructure will be made with the objective of ensuring that broadband service is available to all currently unserved and underserved citizens in the Commonwealth.

We believe that, with the \$40 million in state bond funds to pursue public-private partnerships, the Broadband Institute will be able to accomplish the directives of the Governor and the Legislature to bring affordable, robust and ubiquitous broadband to Massachusetts citizens in areas where the digital divide is greatest.

- However, additional federal funding, will allow the Broadband Institute to go beyond the executive and legislative directives to accomplish even more, and in a shorter time period.

##### *Federal Funding*

The Broadband Institute is mobilized to invest \$200 million to ensure world-class high-speed Internet access for all unserved citizens as well as expand existing capacity for underserved citizens in the Commonwealth.

- With ever increasing capital constraints in all sectors of the economy due to the global economic crisis, including in the telecommunications sector, complementary federal funding will help to further condition the market for broadband infrastructure deployment and make the public-private partnership model more attractive to potential private partners, large and



small, thereby stimulating increased investment in advanced telecommunications services to those areas of Massachusetts desperately in need.

Additional federal funding available for broadband would permit us to lay a lasting foundation for the future by ensuring that funds are spent on world-class, future-proof infrastructure. We are currently working to identify every Massachusetts household that cannot access broadband at any speed. An average of \$3,000 per unserved household would enable deployment of the most future-proof broadband access technologies to unserved households in the Commonwealth. Additional funds would be needed to upgrade other portions of the network, such as statewide backbones and fiber optic cabling connecting unserved areas to major urban centers, to the same future-proof, world-class standard.

### *Scope and Types of Projects*

In preparing for the potential availability of federal funds, the Broadband Institute has already identified a number of “shovel-ready” projects and is working hard to determine where additional federal funding could be most effectively utilized to solve the problem.

As an illustrative project, the Massachusetts Highway Department recently announced that they will be deploying conduits along Interstate 91 and Interstate 291 as part of a \$30 million investment in a high-tech system that will monitor traffic conditions along both corridors and serve as an important homeland security tool for the Commonwealth. Recognizing the synergy between the installation of the high-tech system and the Broadband Institute’s mission, the Broadband Institute is prepared to target investment for the pulling of a publicly-owned 288 count fiber optic cable within existing conduit along Interstate 91. This build would be one component of a larger fiber optic backbone ring that would bring broadband to unserved citizens in western Massachusetts and lay the foundation for broadband expansion throughout the Commonwealth. With the same 288 count fiber, a similar investment could be made on Interstate 90, from Springfield to the New York border. Total projected cost for both projects would be \$4.25 million.

In addition, availability of federal funds would allow the Broadband Institute to implement many of the project proposals that we received through our recently completed “Call for Solutions” process – the equivalent of a Request for Information, or RFI. Through this process, the Broadband Institute has identified a number of thoughtful and feasible proposals. While a number of those proposals can be executed with the use of state funds available via bonds, other proposals require resources that currently do not exist. For example, federal funding would allow the Broadband Institute to target additional investments above and beyond its current capacity, including the deployment of a more complete fiber-to-the-town solution for unserved and underserved areas of the Commonwealth. The total projected cost for this project is \$45 million.

### *Jobs & Local Multiplier Effect*

In keeping with the goals of the Administration’s infrastructure priority requirements, complementary federal funding for broadband infrastructure deployment would not only benefit the public health, safety and welfare, but it would create thousands of jobs for our citizens and stimulate economic development in rural areas of the Commonwealth. The Communications Workers of America estimate that every \$5 billion invested in broadband infrastructure will create approximately 100,000 jobs directly in the telecommunications, information technology and computer sectors. According to the Department of Commerce, communities with broadband added one percentage point to the employment growth rate, 0.5% to the growth of business establishments and 0.5% to the share of IT establishments.

### 2) Renewable Energy in Private Buildings Funding – \$34 million

The Task Force recommends an investment of \$34 million in 2009-2010, matching the existing state commitment under the Commonwealth Solar program, to be used to expand the existing rebate

program and/or increase the rebate per project, as is determined by the Commissioner of DOER to most effectively promote the use of solar energy in private buildings.

### 3) MassDevelopment Non-Profit Facilities Fund – \$1.245 billion

Non-profits contribute significantly to the Massachusetts economy, employing more than 420,000 people and representing more than 13% of the workforce. They employ more people than most industries in the state, including government. The nearly 25,000 non-profit organizations contribute close to \$50 billion to local communities throughout the state each year, through salaries, purchases of goods and services, and other expenditures. In recent years, the number of jobs in the non-profit sector has grown, while overall employment in the state has not.

The support of this sector is critical to the economic well-being of Massachusetts. The recent turbulence in the capital markets, coupled with declining revenues and endowment losses, have resulted in the postponement of \$5 billion of capital projects as identified by recent surveys conducted by MassDevelopment, HEFA, the Massachusetts Hospital Association, the Association of Independent Colleges and Universities in Massachusetts, and the Massachusetts Cultural Council. The table below breaks down the amounts and estimated one year FTEs by specific sector:

Area	Project Cost *	Number of Projects
Higher Education	\$1,527,037,000	67
Cultural Facilities	\$682,940,891	72
Healthcare	\$2,771,218,581	198
<b>TOTAL</b>	<b>\$4,981,196,472</b>	<b>337</b>

\* These projects are not included in the list of Private Development projects; these projects are within the MassDevelopment Non-Profit Facilities Fund program.

The recommendation is to conservatively address this need by creating a fund equal to one-quarter of this identified demand, or \$1.245 billion.

The Non-Profit Fund's primary product offering will be a patient, low-cost subordinated loan that would be forgivable at a future date if the institution did not achieve certain financial ratios. The forgiveness feature would eliminate the risks of rating downgrades, defaults, and bankruptcy that are associated with taking on conventional debt if revenues do not improve and endowments do not recover. The Fund would favor those projects that can break ground the soonest and that have the highest number of permanent jobs (as opposed to construction jobs) associated with the finished project per dollar lent. Demand for this product will likely be greater than its availability, and MassDevelopment will seek to leverage its use with conventional debt to the extent that institutions are willing and able to access the credit markets. The three Fund components are outlined in the Addendum.

### 4) MassDevelopment General Business Viability Fund – \$280 million

In the past quarter, MassDevelopment and other state agencies have received numerous requests for working capital loans from businesses whose needs are not met by private banks either because the businesses are experiencing losses because of the economic slowdown, or because the banks are imposing tighter credit standards than they have in the past and reducing advance rates. The continuation of this trend would cause job losses and lack of growth by businesses that are otherwise viable and would weather the recession if they did not lack working capital.

The FDIC reported that commercial and industrial loans outstanding with Massachusetts banks totaled \$5.6 billion on September 30, 2008. This figure represented an increase of \$.6 billion over the previous year. In a declining economy, much of this increase would have come from businesses tapping their unused lines of credit to cover increased inventory and lower revenues as evidenced by

a nearly 7% decrease the aggregate amount of untapped lines of credit at 180 Massachusetts banks. A 5% reduction (the amount of C&I loans advanced by banks) would equate to a \$280 million financing gap by businesses currently receiving financing from Massachusetts banks.

The Business Viability Loan Fund would plug this gap by providing subordinate loans and loan guarantees for working capital loans, leveraging private capital to the fullest extent possible. Priority would be given to those businesses that have the highest employment per loan dollar and that have the best long-term prospects for viability. Most of the job benefits would come from the retention of existing jobs by viable businesses that would otherwise be forced to downsize or liquidate during the recession. Preserving these jobs would be more cost effective and less disruptive to the economy than allowing them to be lost and then having to create new jobs elsewhere.

#### 5) MassInvest – Micro-Loan and Small Business Lending Retention Fund – \$50 million

The Fund would be a \$50 million financing vehicle to fuel the growth of the Emerging Domestic Market (EDM). Emerging Domestic Markets are defined as people, places, or business enterprises with growth potential that face capital constraints due to systemic undervaluation as a result of imperfect market information and conditions. The market segment represents small and medium sized businesses, minority and women-owned businesses, urban and rural communities, and companies that serve low-to-moderate-income populations.<sup>1</sup>

- 89% of all U.S. businesses have less than \$1 million in annual sales; 81% have less than \$1 million in revenues; and 14% have \$1-5 million in revenues
- 46% of all small businesses use personal payment cards as a financing source
- 25% of all EDM businesses are growing faster than national rate for all small businesses and account for 27% of all U.S. businesses
- 26% of US firms are women-owned, yet these businesses received 5% of venture capital investments
- 15% of US firms are minority-owned, yet they received less than 2% of venture capital investments
- 19% of US businesses are located in rural areas, yet they received less than 2% of venture capital investments.

The US Census Bureau's 2006 statistics indicates that Massachusetts has 125,045 EDM businesses that report a payroll, representing 86.3% of all such firms. This figure excludes the state's estimated 500,000+/- sole-proprietorships. The SBA reports that EDM's have created 60 to 80% of the net new jobs since the mid-1990s. During the current economic downturn, retaining businesses in this market segment is very important as they will continue to be a key component of the Commonwealth's economic engine.

#### Current Market Segment Conditions

The current poor state of the U.S. economy is a challenge for small firms seeking financing. Bank lending is off 30 percent from last year due to the credit crunch, resulting in a general concern about lending to small businesses. According to the "Small Business Economic Outlook" conducted by the Congressional Small Business Committee, lending standards have tightened considerably reflecting the lowest supply of credit for small firms in Federal Reserve history. In The Federal Reserve's Senior Loan Officer Survey over 65% respondents reported tighter credit standards on commercial and industrial loans, with over 66% bank officers reporting tighter credit standards on credit cards, compared to just 32% in the previous survey. Furthermore, the drop in housing prices has meant a fall in collateral for new and small firms seeking funding. In order to better assist small businesses and help them to survive the current economic downturn and resulting credit crunch, new financing products that supplement the current offerings need to be considered.

Market research, trend analysis and national policy forums have revealed that EDM segments have sophisticated financing needs and a desire to grow. The EDM is neither proportionately served nor effectively serviced by existing (non-credit card) lending products or institutional service providers, given their historical economic contribution to the GDP of 50% and annual growth rate of 12.8%.

The gaps in financial products to the targeted market segment are due in part to:

- Conventional banks are highly regulated and make financing decisions based on historical performance instead of future opportunity.
- Investment banks and private equity firms maintain narrow investment criteria and lack familiarity with the small business market segment.
- Community financial development institutions, while often strong on relationships within the market, typically do not have access to a full suite of customized 'investment bank' financing options and advisory services. In addition, they typically serve smaller "micro" businesses, those with five or fewer employees, as opposed to focusing exclusively on the customized needs of a select group of companies with substantial growth potential.
- The consolidation in the banking industry has led to a drop in local lending partners who know their customers and understand their business models.
- Market research and national policy forums have revealed that small business markets have sophisticated needs and a desire to grow that is served neither appropriately nor effectively by existing financial services providers.

The fund will address some of the current deficiencies by offering structured flexibility that will enable targeted economic sustainability and, in some cases, growth for businesses with no access to conventional venture capital funds. In addition, by pairing advisory services with the financing, the Commonwealth's investment risk is mitigated and it ensures that capital is being used most efficiently.

#### Components of the Proposed MassInvest Fund

##### **A. Micro-Loan Fund** (*for seed stage businesses*)

The proposed Micro-Loan Program fills a product gap for loans between \$35,000 and \$100,000 which is currently not being served by either commercial lenders or non-profit lenders in Massachusetts. The funds will be distributed to existing Micro-Loan providers throughout the State with specific lending guidelines. These micro-lenders will also be required to offer technical assistance as a condition of receiving the new funds.

Family Asset Support – A portion of these funds will also be used in conjunction with the Individual Development Account (IDA) Program that DHCD administers to micro-lenders across the state. The IDA program provides matching funds to the savings of low-income participants. The proposed micro-loans would be considered an eligible match to savings accumulated by participants via the IDA Program. The new funds will allow micro lenders to leverage additional private and federal monies, thus expanding their pool of resources.

##### **B. Small Business Retention Fund** (*for established small businesses*)

The Small Business Retention Fund supplements traditional credit lines and terms loans typically offered by private market and public programs. Target businesses are those with *limited or no* access to conventional loan and investment capital funding products. Additionally, the fund provides a provision which pairs technical and advisory services with financing, mitigating the Commonwealth's investment risk and ensuring that capital is being used most efficiently.

The 2008 Babson Entrepreneurship Monitor Report highlights that “*funding for microenterprises and small businesses may not match the needs of the business.*” The Babson study further indicates the need to provide “stop-gap funding to the businesses between start-up and high growth” stage of development. This type of funding is often referred to as “patient capital” and it provides entrepreneurs advantages that debt funding does not by allowing them payment flexibility during times of unexpected contraction in the marketplace. Second, the fund provides advisory services to building business capability.

- Fund is for Massachusetts businesses that may be at risk of closing due to the current economic conditions or those have the potential to grow their revenues and create new jobs.
- Funds can be used to provide direct loans to businesses; and loan guarantees and credit enhancements to banks and other private commercial lenders;
- Situational loan terms for working capital needs (loans with longer terms than typical, as referred to as “patient capital”)
- Debt restructuring; and
- Advisory services paired with financings
- Standardized reporting requirements

#### 6) Life Sciences Center Funding- \$50 million

The Task Force recommends an investment of \$50 million in 2009-2010, matching the existing state commitment under the Life Sciences Initiative, to be used for grant, loan and equity investments in start-up and entrepreneurial life sciences companies.

#### 7) Clean Energy Center Funding- \$50 million

The Task Force recommends an investment of \$50 million in 2009-2010 to be used for grant, loan and equity investments in start-up and entrepreneurial clean energy and energy efficiency companies.

#### 8) Recapitalization of John Adams Innovation Institute- \$25 million

The Task Force recommends an investment of \$25 million in 2009-2010 to be used for grant, loan and equity investments in start-up and entrepreneurial companies in the information technology, advanced manufacturing and advanced materials sectors.

#### 9) Foreclosed Properties Rehabilitation Fund- \$45 million

The Task Force recommends an investment of \$45 million in 2009-2010 to be used for the rehabilitation of recently foreclosed properties, supplementing federal funds authorized last year for that purpose.

## 6. Agency Staffing Plans

The following table provides a summary snapshot of the staffing needs discussed in more detail throughout this section.

<b>Federally funded FTE Request Based on Agency Staffing Analysis</b>	<b>Number of FTEs</b>
<b>Public Infrastructure</b>	2
<b>Affordable Housing</b>	3
<b>Renewable Energy</b>	0
<b>Mass-Development</b>	5-6
<b>Mass-Invest</b>	2-3
<b>Life Sciences</b>	0
<b>Clean Energy</b>	2-3
<b>Recapitalization of John Adams Innovation Institute</b>	2-3
<b>Foreclosed Properties Rehabilitation Fund</b>	2-3

### Traditional Public Infrastructure

The proposed public investment would require two additional full-time staff within the Department of Business Development to provide overall program administration due to the volume of projects. Each project may also require additional project staffing at the level of the specific agency or municipality having primary responsibility for project execution.

### Affordable Housing Developments

The proposed public investment would require three additional full-time staff within the Department of Housing and Community Development to provide overall program administration due to the volume of projects. One position is a management position required to oversee the execution of these funds in a timely, efficient manner consistent with all applicable federal and state requirements. The remaining two positions are somewhat junior positions required to process the applicable paperwork and monitor the use of the funds.

### Program Initiatives

#### a) Broadband Program Investment

Federal funding would also be used for programmatic hiring at a level necessary for the prudent and expeditious use of additional funds for broadband infrastructure in the Commonwealth. Possible positions include: (1) an interagency liaison position to work closely with other secretariats such as the Executive Office of Transportation and Public Works (Massachusetts Highway Department) to identify complementary capital projects and the Executive Office of Administration and Finance (DCAM) to ensure proper asset management principles are incorporated into broadband projects; (2) an additional two program positions at the Broadband Institute with network design experience to manage projects specifically tied to potential federal funding; and (3) a municipal preparedness position to work collaboratively with municipalities and regional planning authorities to ensure that a streamlined approach is taken at a local and regional level with regard to permitting and ordinance issues.

- b) Renewable Energy in Private Buildings Funding: No additional staffing needs
- c) MassDevelopment Funds: 5-6 additional staff needed.
- d) MassInvest – Small business and micro-lending program: 2-3 additional staff needed.
- e) Life Sciences Center Funding: No additional staffing needs.
- f) Clean Energy Center Funding: No additional staffing needs.
- g) Recapitalization of John Adams Innovation Institute: 2-3 additional staff needed.
- h) Foreclosed Properties Rehabilitation Fund: 2-3 additional staff needed.

## 7. Barriers and Obstacles to Achieve Objectives

Barrier / Obstacle	Mitigation Strategy / Actions Required
<b>Traditional Public Infrastructure</b> Completion of design needed to allow construction start within six months may require financial resources other than federal funding.	Make available state resources for final completion of design and permitting of otherwise eligible priority projects
<b>Traditional Public Infrastructure</b> Some worthwhile projects may not be able to start construction within six months without design-build authority ( <b>may require legislative relief</b> ).	Make needed statutory change to grant design-build authority for otherwise eligible priority projects
<b>Traditional Public Infrastructure</b> Completion of final project permitting may require expedited attention by permitting authorities.	Mobilize inter-agency permitting board to expedite final permitting for otherwise eligible priority projects
<b>Program Initiatives</b> MassDevelopment Funds – Potential for perceived competition with banks and other lenders	Develop program in close coordination with private banks and financial institutions to target funding at financing gaps not covered by private sector
<b>Program Initiatives</b> MassDevelopment Funds – Continued lack of private party investors, even with public partners mitigating their risks	Develop program in close coordination with private banks and financial institutions and obtain upfront commitments to lend where agreed-upon public commitments are made
<b>Program Initiatives</b> MassInvest Funds- Effective promotion of funds being available to potential beneficiaries	Collaboration with the MA Bankers Association, MA Community & Banking Council, Community Development Financial Institutions (CDFI's), Small Business Development Centers (SBDCs), the Small Business Administration and our existing diverse network of regional and industry-specific small business lenders to promote the availability of funding
<b>Program Initiatives</b> MassInvest Funds – Potential for perceived competition with banks and other lenders	Develop program in close coordination with private banks and financial institutions to target funding at financing gaps not covered by private sector
<b>Program Initiatives</b>	Develop program in close coordination with

Barrier / Obstacle	Mitigation Strategy / Actions Required
MassInvest Funds – Continued lack of private party investors, even with public partners mitigating their risks	private banks and financial institutions and obtain upfront commitments to lend where agreed-upon public commitments are made

## 8. Metrics for Measuring Success

### Metrics

Metric	Description	Method for Monitoring / Measurement
<b>Traditional Public Infrastructure – Square Footage</b>	<ul style="list-style-type: none"> <li>Square feet of private commercial development for which construction actually starts due to public investment</li> </ul>	<ul style="list-style-type: none"> <li>Participants agree to submit metrics as a requirement of financing</li> </ul>
<b>Traditional Public Infrastructure – Square Footage</b>	<ul style="list-style-type: none"> <li>Square feet of private commercial development for which sites are now “shovel-ready” due to public investment</li> </ul>	<ul style="list-style-type: none"> <li>Participants agree to submit metrics as a requirement of financing</li> </ul>
<b>Affordable Housing Developments – Units</b>	<ul style="list-style-type: none"> <li>Number of housing units for which construction actually starts due to public investment</li> </ul>	<ul style="list-style-type: none"> <li>Participants agree to submit metrics as a requirement of financing</li> </ul>
<b>Affordable Housing Developments – Units</b>	<ul style="list-style-type: none"> <li>Number of housing units for which sites are now “shovel-ready” due to public investment</li> </ul>	<ul style="list-style-type: none"> <li>Participants agree to submit metrics as a requirement of financing</li> </ul>
<b>Program Initiatives – MassDevelopment Funds – Jobs</b>	<ul style="list-style-type: none"> <li>Short and long-term jobs created</li> <li>Long-term jobs retained</li> </ul>	<ul style="list-style-type: none"> <li>Participants agree to submit metrics as a requirement of financing</li> </ul>
<b>Program Initiatives – MassDevelopment Funds – Return on public monies</b>	<ul style="list-style-type: none"> <li>Private funding leveraged due to public investment</li> <li>Where applicable, revenue enhancement of businesses financed with public monies</li> </ul>	<ul style="list-style-type: none"> <li>Participants agree to submit metrics as a requirement of financing</li> </ul>
<b>Program Initiatives – MassInvest – Jobs</b>	<ul style="list-style-type: none"> <li>Short and long-term jobs created</li> <li>Long-term jobs retained</li> </ul>	<ul style="list-style-type: none"> <li>Participants agree to submit metrics as a requirement of financing</li> </ul>
<b>Program Initiatives – MassInvest – Return on public monies</b>	<ul style="list-style-type: none"> <li>Private funding leveraged due to public investment</li> <li>Where applicable, revenue enhancement of businesses financed with public monies</li> </ul>	<ul style="list-style-type: none"> <li>Participants agree to submit metrics as a requirement of financing</li> </ul>



## State Facilities and Courts Task Force

### 1. Introduction

***The Mission of the State Facilities and Courts Task Force.*** The State Facilities and Courts Task Force was established by the Governor to plan and prepare for the possibility of receiving significant new federal funding under the anticipated Federal Act for investment in state facility and court capital projects. Specifically, the Governor charged the State Facilities and Courts Task Force with developing a work plan that provides the following information with respect to investments in state facility and court projects: (i) a statement of overall objectives; (ii) a list of projects that are “shovel-ready”, including project description, location, cost, schedule and agency or entity responsible; (iii) a staffing plan for carrying out projects funded under the Federal Act; (iv) metrics by which to measure success in meeting objectives; and (v) any gaps or barriers identified to meeting the objectives as well as plans to address them.

The work assigned to this Task Force by the Governor is critical to ensuring that the Commonwealth is prepared to take full advantage of the opportunity presented by the Federal Act. Significant federal funding for these types of capital investments would not only create desperately needed jobs in the near term, but it would also allow the Commonwealth to address a backlog of capital investment needs and further other important priorities that result in long-term benefits.

Under the Federal Act, however, there are expected to be “use it or lose it” provisions that require the commitment and expenditure of federal funds on eligible capital projects within specified time frames. These provisions are being included to ensure that the funding is being spent on projects that can commence quickly and create jobs in the near term. If a state does not spend funds for eligible projects quickly enough, the funds are expected to be reallocated to other states. The work of this Task Force – and the others established by the Governor – will help ensure that we are ready to invest any funds we receive promptly and wisely.

It should be noted that the scope of work of this Task Force was limited to potential capital investments in the following types of state facilities: buildings and facilities owned and operated by state agencies; state-funded public housing; court buildings and buildings and facilities under the control of the Massachusetts Convention Center Authority. Investments in transportation infrastructure, municipal facilities and privately-owned facilities are being addressed by other task forces. In addition, any energy efficiency or renewable energy investments in state facilities and courts and any investments in state higher educational facilities are being addressed by other task forces, but the projects may be in the project lists for the State Facilities and Courts Task Force and the other task forces.

***The Process of the State Facilities and Courts Task Force.*** The State Facilities and Courts Task Force was established in mid-December 2008. Pursuant to the Governor’s direction, the Task Force was composed of a broad range of stakeholders, including: representatives of the state agencies that carry out state facility and court capital projects, representatives of state agencies that use state facilities and courts, representatives of contractor and subcontractor associations, a representative of a building trades organization, representatives of the business community, state legislators and representatives from the Office of Labor and Workforce Development. The individual members of the State Facilities and Courts Task Force are listed in *Section 2* below. This broad representation contributed to productive, well-informed and thoughtful deliberations at Task Force meetings at which all perspectives were articulated and considered.

The State Facilities and Courts Task Force held five meetings of the full Task Force, the first of which was held on December 22, 2008 and the last of which was held on January 21, 2009. At its first meeting, the Task Force developed objectives for investments made in state facility and court capital

projects funded under the Federal Act and metrics that should be used to measure our success in meeting those objectives in connection with any such investment of federal funds. At the second meeting, the Task Force discussed the project readiness criteria the state agencies should use in identifying eligible projects for consideration and began to identify gaps and barriers to achieving the objectives for state facility and court capital investments. At the third meeting, the Task Force reviewed the staffing plans of the agencies that would be responsible for carrying out the federally-funded projects. At the fourth meeting, the Task Force reviewed the status of the agencies' development of lists of "shovel-ready" projects, identified gaps and barriers to achieving the objectives for state facility and court capital investments, and identified plans for addressing those gaps and barriers. At the fifth and final meeting, the Task Force reviewed a draft of this report and made final decisions with respect to the content of the report.

***The Final Product of the State Facilities and Courts Task Force.*** The State Facilities and Courts Task Force is proud to submit the work plan contained in this report. This work plan is responsive to the Governor's request and reflects a lot of hard work by all members of the Task Force, particularly the representatives of the state agencies that will be responsible for carrying out any state facility and court projects funded under the Federal Act. The collaborative and constructive deliberations at task force meetings resulted in more thoughtful and comprehensive planning than each agency could have done on its own. This was a valuable process, and the quality of the work plan presented in this report reflects the thoughtful and valuable contributions made by all of the Task Force members.

## 2. Members

Name	Title	Agency / Organization
Gonzalez, Jay (Chair)	Undersecretary	Executive Office for Administration and Finance
Bernard, Steve	Assistant Secretary for Administration and Operations	Executive Office of Health and Human Services
Brewer, Stephen	Senator	Massachusetts State Senate
Cooper, Stephanie	Chief of Staff	Department of Conservation and Recreation
Donaghey, Ellen	Chief Fiscal Officer	Executive Office of Public Safety and Security
Gatzunis, Thomas	Commissioner	Department of Public Safety
Haley, Jack	Director of Engineering & Maintenance	Massachusetts Convention Center Authority
Lawton, Monica	Executive Director	Associated Subcontractors of Massachusetts, Inc.
Mulligan, Robert	Chief Justice for Administration and Management	Administrative Office of the Trial Court
O'Flaherty, Eugene	State Representative	Massachusetts House of Representatives
Perini, David	Commissioner	Division of Capital Asset Management
Petrucci, Robert	Executive Director	Associated General Contractors of Massachusetts
Raso, Charles	Business Manager	Bricklayers and Allied Craftsmen Local #3

Name	Title	Agency / Organization
Schectman, Amy	Associate Director for Public Housing and Rental Assistance	Department of Housing & Community Development
Wallace, David	Director	Division of Apprentice Training, Department of Workforce Development
Walsh, Jim	Executive Director	Massachusetts Sheriffs' Association

### 3. Key Objectives for State Facilities and Courts Task Force

The primary goal of the Federal Act is to invest in projects that can commence quickly and create jobs in the near-term to help lay the foundation for an economic recovery. Across the Commonwealth, as of December, 2008, nearly 27,000 construction workers were collecting unemployment benefits, and more are expected to join the unemployment rolls in the ensuing months. An influx of federal funding for capital investments in state facilities and other public infrastructure will help to reverse this trend and to support a wide-range of trades and industries throughout the Commonwealth.

#### Governor's Guiding Principles

In addition to furthering this important job creation objective, the Governor has charged this Task Force and other task forces with developing plans to use the opportunity presented by the federal funding to make investments that further other important objectives of the Commonwealth. In charging each task force with developing these objectives for each particular area of infrastructure investment, the Governor directed the task forces to observe the following guiding principles:

Guiding Principles	Description
<b>Invest for the Long Term</b>	All projects under this program should have a long-term benefit, in addition to the stimulus effect of putting people back to work now.
<b>Limit Impact on Operating Budgets</b>	Prefer investments that will reduce – or at least not add to – demands on the operating budget.
<b>Follow Established Infrastructure Priorities</b>	Make choices based on the infrastructure recommendations recently approved at the Development Cabinet.
<b>Diversify</b>	Subject to whatever constraints there may be in the federal legislation, prioritize projects for funding in a manner that ensures funds will be allocated across a variety of industries and geographic locations.
<b>Buy Massachusetts</b>	To the extent possible, contract with Massachusetts contractors, purchase goods and services from Massachusetts companies, and hire Massachusetts people.

## Task Force Guiding Principles and Objectives

In furtherance of the job creation goal and the Governor's guiding principles the State Facilities and Courts Task Force developed the following objectives for investment of any available funds under the Federal Act in state facility and court projects:

### Objectives for State Facility and Court Investments

- Create positive economic impact – create construction jobs in near term and preferably for a sustained period of time.
- Improve condition of state facilities – address backlog of deferred maintenance to address structural integrity of building stock, remedy health and safety concerns, improve environment for state workers, public housing residents and members of the public, and reduce maintenance and future capital investment costs.
- Gain long-term benefits – invest in projects that are consistent with the Administration's infrastructure investment priorities, support core functions of state government and support the missions and long-term programmatic goals of state agencies.
- Achieve efficiencies – invest in projects that result in operating budget savings or programmatic efficiencies.
- Diversify investments – invest in different types of state facilities, different types of projects involving different trades and industries, and different parts of the state to ensure that a wide variety of state agencies, contractors, workers and areas of the state benefit.
- Deliver projects on-time and on-budget – proactive agency management of projects to ensure effective and efficient project delivery.

To the extent the Commonwealth has flexibility in allocating federal funding – or state bond capacity indirectly made available as a result of federal funding – for state facility and court projects, the Task Force recommends that “shovel-ready” projects be prioritized for funding based on these objectives. Specifically, the extent of the economic and jobs impact should be given significant weight and should be evaluated based on the number of construction jobs estimated to be created by a project, duration of the project and of the related jobs, the types of jobs expected to be created and the location of the project. In addition, to the extent possible, each state facility or court project funded should satisfy the next three objectives – improve the condition of state facilities, achieve other long-term benefits and achieve efficiencies – and greater weight should be given to those projects that will most effectively further these three objectives. After prioritizing projects for funding based on the approach and objectives described above, adjustments should be made as needed to ensure that the objective of diversifying investments in state facilities and courts across different types of facilities, different trades and industries and different regions of the Commonwealth is satisfied. Lastly, state agencies should take all steps within their control to deliver projects on-time and on-budget.

With respect to the long-term benefits objective noted above, the missions and long-term programmatic goals and priorities of the related state agencies will be a key consideration. Based on information provided by certain agencies in connection with this task force report, the following are some of the agency-specific goals and priorities that should be taken into account in evaluating projects under their purview in considering this objective:

## Agency Objectives

### Division of Capital Asset Management (DCAM)

DCAM is the primary manager of vertical building construction for state facilities and does not typically operate state facilities. The agency's central focus on delivering quality, cost-efficient service to its client agencies acknowledges the importance of capital facilities in the delivery of critical state

services to those citizens that are often the most vulnerable. Towards that end, DCAM works to support client agency core functions by improving the physical condition of critical state facilities. Through its energy programs and other projects, DCAM also seeks to provide the most cost efficient facilities for its clients – working to save operating dollars that could be better spent by client agencies on their critical programs.

Another important aspect of DCAM's work is to improve public health and safety. This includes demolition of long abandoned state buildings to enhance public safety and save money; installing new heating, ventilation, and air conditioning systems to improve indoor air quality and comfort at older facilities; and implementing environmental remediation projects at state facilities to improve environmental quality.

The proposed Federal Act offers DCAM a unique opportunity to further its mission in support of the myriad agencies that it serves:

- DCAM is charged with building new or replacement facilities to house critical state functions. There are many such key projects proposed for federal funding, including several in support of the Governor's higher education agenda.
- DCAM is increasingly focused on promoting sound maintenance of existing state facilities. The vast majority of DCAM's proposed projects for federal funding do just that – addressing critical building repairs that will help to extend the useful life of these important assets.
- DCAM has been implementing energy efficiency retrofits at state facilities for more than two decades. The energy component of DCAM's mission, however, is focused on this area like never before in response to the high priority placed on energy efficiency by Governor Patrick and the Administration. In addition to ensuring that new facilities are built with energy and the environment in mind, DCAM's proposed project list includes many energy retrofit projects that will reduce operating costs, and the environmental impacts at dozens of existing state facilities. These projects are included in the Energy Task Force report.
- Finally, DCAM is charged with the sound management of the state's real estate holdings. Many projects on the proposed DCAM list will allow for demolition and environmental cleanup of surplus state properties. This will improve public health and safety, while, in many cases, paving the way for redevelopment of the properties in the future.

### **Department of Conservation and Recreation (DCR)**

The Department of Conservation and Recreation is steward of one of the largest state parks systems in the country. DCR is responsible for 450,000 acres made up of forests, parks, greenways, historic sites and landscapes, seashores, lakes, ponds, reservoirs and watersheds. DCR manages a range of state facilities including over 2,000 buildings, hundreds of bridges, parkways, rinks, pools and other active recreation facilities.

DCR's capital program for FY2009 consists of about \$138 million in funding and over 90 projects or categories of spending. Capital Projects vary widely and include: land acquisition, bridge and parkway maintenance and rehabilitation, maintenance and new construction of pools, as well as upgrades to existing recreational facilities and complexes including visitor centers, comfort stations, ball fields, camping areas, pathways and parking lots.

DCR used a similar process to its capital planning process to establish its key objectives for the projects recommended for funding by the Federal Act. This process included consultation with the Office of the Commissioner, Engineering, Planning, Park Operations, Program Development, External Affairs, Government Affairs and Legal as well as the various agency constituencies. Plans and projects put forth were evaluated based upon key criteria, including:

- *Public Safety/Public Health* – Protecting the public safety/health or meet a public safety/public health regulation.
- *Impacts on Maintenance Costs* – Reducing the cost of maintenance via an upgrade of a facility or reducing energy or utility costs by constructing/installing energy efficient and less costly equipment for lighting or traffic signals.
- *Public Demand* – Serving an area of high demand and meeting the needs of the community it will serve (e.g., constructing a comfort station for a heavily used public beach).
- *Underserved location* – Filling recreation needs in an area where other facilities, public and private, are not available (e.g., public recreation facilities in inner city neighborhoods).
- *Equitable distribution throughout the Commonwealth* – Improving facilities throughout the Commonwealth.
- *Alternative Funds* – Prioritizing projects based on the availability of non-state funds to maximize state investment.

Projects reflecting these criteria were identified for inclusion in the Task Force report.

### **Department of Fish and Game (DFG)**

The Department of Fish and Game (DFG) is charged with stewardship responsibility over the Commonwealth's marine and freshwater fisheries, wildlife species, plants and natural communities. The Department conserves and restores the state's rivers, streams, lakes, ponds, wild lands, and coastal waters through programs of research, restoration, and land protection. The DFG also promotes recreational uses of the state's public lands and waters consistent with the agency's mission. Through its Division of Marine Fisheries, the DFG regulates Massachusetts' commercial fishing industry, which is ranked third in the nation after California and Florida in terms of product sales and jobs supported.

The DFG has four principal divisions: the Division of Fisheries and Wildlife (DFW); the Division of Marine Fisheries (DMF); the Office of Fishing and Boating Access (FBA); and the Riverways Program. DFW has numerous regional offices and other facilities that desperately need rehabilitation and maintenance. The division also manages more than 170,000 acres of wildlife management areas, some of which have dilapidated houses and other structures that should be removed to promote public safety and environmental stewardship. DMF facilities such as its shellfish purification plant and laboratories are in need of major upgrades. The FBA maintains more than 275 boating access facilities and sport fishing piers that have major maintenance needs, while the Riverways Program partners with federal, state, and private entities in projects that involve dam removal, culvert and bridge reconstruction, fish passage and other construction to benefit fish and other aquatic dependent wildlife, while promoting public safety and long term cost savings.

A key objective of the projects DFG has recommended for Federal Act funding is to reconstruct and rehabilitate existing facilities. When evaluating projects, DFG focused heavily on projects that supported job creation while also remedying safety and accessibility problems at existing facilities.

### **Department of Housing and Community Development (DHCD)**

DHCD's Division of Public Housing and Rental Assistance (DPHRA) is responsible for assisting Local Housing Authorities (LHA) in the development, management and maintenance of the 50,000 units of state public housing for low-income families (16,000 units), elders (32,000 units) and persons with special needs (2,000 units). Located in 242 communities across the Commonwealth, the program is available to households with incomes of less than 80% of median and is a major element in the state's safety net, housing over 15% of the Commonwealth's extremely low income households (less than 30% of median).

For the 16 years prior to the Patrick/Murray Administration, there was severe underfunding in both capital and operating assistance. The Administration has taken an aggressive approach to restoring the condition of this precious housing, but prior neglect has resulted in a backlog of capital needs of roughly \$2 billion. The resulting poor conditions cause accelerated building deterioration and negatively impact the health and safety of tenants, who make up more than one percent of the state's population.

DPHRA provides state funds to LHA's in the form of operating subsidies and capital grants while staff professionals provide technical assistance and oversight to maximize the efficiency and effectiveness of local operations. Within DPHRA, the Bureau of Housing Development and Construction (BHDC) provides targeted assistance in meeting LHAs' most urgent capital needs through a variety of programs, each of which includes a multiyear pipeline of projects which together represent needs of hundreds of millions of dollars. Projects include repair, replacement or modernization of failing roofs and building envelope components, failing heat and hot water systems, inadequate ventilation and electrical systems, aged and failing elevators, plumbing and plumbing fixtures, sewers, cabinetry, interior finishes and equipment and deteriorating pavement and site facilities.

DHCD evaluated its \$2 billion backlog to identify the highest priority projects to recommend for funding from the Federal Act, as well as evaluating the anticipated staffing needs of those projects and how to best leverage existing DHCD and LHA staff to manage the work. The projects recommended are prioritized according to the following key objectives:

- Acceleration of projects underway in the current capital pipeline, and inclusion of energy- and water-saving enhancements.
- Energy- and water-saving projects – referred to as Sustainability Projects – that could be managed at a large-scale that LHA could manage installation of, such as statewide purchases of water saving toilets, and appliances and fixtures. The total dollars requested for these projects is included in the Energy Task Force report, but the detailed project list and staffing needs are included within the State Facilities report.
- Projects that address immediate code improvements to improve quality of life and accelerate re-occupancy of vacant units, and can be delegated and delivered by LHA on their own or with limited support from DHCD and local contractors and craftsmen.
- High-value comprehensive modernization projects with significant energy and water conservation components were then prioritized. Projects that are in-design and can be “shovel-ready” within 180-days were selected for recommendation.

### **Massachusetts Convention Center Authority (MCCA)**

The MCCA's mission is to generate significant regional economic activity by attracting conventions, tradeshows, and other events to its world-class facilities while maximizing the investment return for the residents and businesses in the Commonwealth. The MCCA owns and oversees the operation of the Boston Convention & Exhibition Center (BCEC), the John B. Hynes Veterans Memorial Convention Center, The MassMutual Center in Springfield, MA and the Boston Common Garage.

The Massachusetts Convention Center Authority is seeking project funding to enable the organization to satisfy five key objectives, all of which shall accrue significant benefit to the citizenry of Massachusetts and more specifically, the many exhibitors, attendees, fans, patrons, clients, and employees who visit, park, or work in one or more of four State owned facilities. The identified project mix effectively eliminates a public safety issue and significantly enhances the work place environment in the Hynes Convention Center by the elimination of a known potential health risk. The suggested improvements to the Boston Common Garage and the Mass Mutual Center facilities are designed to enhance the customer experience and positively impact both expenses and the revenue these two important facilities contribute to the Authority's overall operating budget annually. Lastly, the further investment made in the Springfield Massachusetts facility will better insure that our Sports Arena



building continues to satisfy the needs of our main tenant, the Springfield Falcons, and their valued ice hockey fans who live in and around the City of Springfield. This relationship is very important to the residents and businesses located in the heart of the city.

#### 4. “Shovel-Ready” Projects

Agencies followed a similar process for identifying “shovel-ready” state facility and court projects for which construction work could commence within 180 days. The project readiness evaluation is critical to ensuring the Commonwealth identifies and considers projects for funding that will be sure to satisfy the “use it or lose it” requirements under the federal legislation. The agencies all engaged in an intensive and diligent process to identify “shovel-ready” projects and to take creative approaches to planning project delivery methods to expand the list of projects that meet the readiness criteria.

##### Project Pipeline Evaluation

All task force member agencies began the process of prioritization by first evaluating their universe of potential projects. They each gathered project information from a variety of information sources, including:

- **Capital plans.** All agencies reviewed their projects expected to be funded in the out years of the Commonwealth five-year capital investment plan to determine if they could be accelerated. Each agency leveraged its respective capital planning systems and internally managed project databases. They reviewed their multi-year project pipelines with the Governor’s and Task Force’s objectives and priorities in mind.
- **Constituency requests.** Agencies evaluated requests and recommendations provided by agencies, partners, advocates and facilities staff. DCAM reviewed past and new funding requests from client agencies. DCR consulted with their partners, advocates and facilities staff. DHCD solicited proposals from its LHA partners based on their deferred maintenance backlogs and capital plans.
- **Deferred maintenance.** Backlogs in deferred maintenance identified through the agencies’ asset management databases that had been considered but not ultimately included in state capital plans were reviewed.

##### Readiness

Task force members gathered their most senior leaders, including construction and facilities staff to narrow the lists of projects to those that they are confident could begin construction work within 180 days and consequently would be likely to meet the “use it or lose it” requirements that are ultimately included in the Federal Act. Projects were evaluated to ensure that sufficient design was completed to enable them to be “shovel-ready” within 180 days, or that a contractor could be hired within 180 days to commence this work. This evaluation included an assessment of the amount of time it typically takes to procure and commence similar projects, the extent to which site acquisition, permits or other potential obstacles to commencing a project exist, and work and planning done to date. Agencies also worked with their partners (e.g., LHA) to select projects that could be feasibly implemented and managed by them, thereby leveraging local staff expertise and experience.

Each agency identified different types of projects and approaches to ensure project readiness:

- **Expansion:** Add scope to projects that are in the design or construction pipeline. These projects are on the FY2009 capital plan and with the addition of Federal Act funding could have expanded scopes that were not planned until future years.
- **Acceleration:** Accelerate the timeline to complete projects that are in study or design and are already approved on the state’s capital spending plan for future years.



- **Deferred maintenance:** Complete critical repairs or replacements that have been backlogged and could commence quickly.
- **Bid ready and new projects:** Projects that have been partly or fully designed, but are not yet approved and funded under the state's capital program.

To allow for streamlined management and delivery of the work and to ensure project readiness, certain types of small projects are planned to be bundled into logical groupings to maximize the efficiency of procuring and managing contractors to do the work, and/or to allow for one team of in-house experts to execute a group of projects. These planned bundling opportunities were limited to those groupings of projects where significant time savings and/or cost savings will be realized or where significant risks with respect to project commencement and delivery would be avoided.

- DCAM will bundle envelope (windows, roofs, enclosures) projects where there are multiple projects at a facility, and will bundle site work (paving, roadways, and sidewalks).
- Where there is an energy project planned or underway at a facility, DCAM will incorporate related repairs and envelope work into the project.
- DCR's capital program includes a number of general project categories where additional funds can be added to existing contracts to expand the number and range of project completions using existing staff resources (e.g., paving, dam maintenance, stormwater management).
- DHCD has identified sustainability projects targeting energy and water savings, clean energy, and green building that could be procured quickly, as they do not require design (e.g., low flow toilet initiative, energy efficient appliance and lighting program, solar roof program, regional ESCOs). Many of these projects are included in the Energy Task Force report.
- MCCA has identified projects that can all be supported using their House Doctor design firm, Simpson, Gumpertz, and Heger, Inc. and can be managed day to day by Tishman Construction Corporation.

## 5. Projects

Projects recommended for prioritization from the State Facilities and Courts Task Force have been provided by the following agencies: Administrative Office of the Trial Court, Division of Capital Asset Management, Department of Conservation and Recreation, Department of Fish and Game, Department of Housing and Community Development, the Executive Office of Public Safety and Security, Massachusetts Convention Center Authority, and Massachusetts Sheriffs' Association.

Agency	Types of Projects	Total Federal Act Request (\$ Millions)
DCAM		\$848.11 *
	Higher Education, including UMASS	\$438.49
	Health & Human Services	\$116.66
	Sheriffs	\$91.35
	Judiciary/Courts	\$84.46
	Public Safety	\$44.91
DHCD		\$596.8 **
	Current Pipeline	\$281.8

Agency	Types of Projects	Total Federal Act Request (\$ Millions)
	LHA Delegation	\$133.7
	Comp-modernization	\$73.5
	Strategic Sustainability	\$36.9
	New Code/Life Safety	\$11.0
DCR		\$280.9
DFG		\$55.8
MCCA		\$10.4

\* Excluding duplicates with Energy, the Total Federal Act Request for DCAM is \$612.8 MM. Please refer to section IV of the report for a detailed list of duplicates

\*\* Excluding duplicates with Energy, the Total Federal Act Request for DHCD is \$466.02 MM. Please refer to section IV of the report for a detailed list of duplicates

## 6. Agency Staffing Plans

Each Agency has evaluated their staffing needs to administer and manage the projects recommended and has provided estimates for the number and type of jobs that will be needed. It is important to note that agencies would need to carry out these federally funded projects in addition to their existing workload. Actual staffing requirements will ultimately depend on the actual number of projects or funding amount received. The Workforce Development Task Force report includes recommendations for expediting the hiring process and method of hiring any additional staff that would be required. It is assumed that any additional staffing needs would be funded from amounts made available under the Federal Act.

The table below shows the existing construction-related staffing at each agency and the annual construction production rate for FY2009. These FY2009 numbers do not include funding requested through the Federal Act. The purpose of this table is to estimate the annual construction production rate per construction-related Full-Time Equivalent (FTE). Based on that, the estimated number of additional staff required to manage the projects that will be federally funded can be estimated.

Table 1: FY2009 Staffing Plans & Annual Production Rate (Not including Federal Act projects) (\$s Millions)							
	DCAM	DHCD	DCR	DFG	MCCA	Ref.	Source
Total FY2009 Construction FTE	173.5	47	151	5	20	<b>A</b>	Current Agency Construction staffing
Construction Production on FY2009 Capital Plan	\$358.0	\$104.0	\$147.5*	\$1.6	\$24.6	<b>B</b>	FY2009 Construction Capital Budget
FY2009 Annual Production/ Construction FTE	\$2.1	\$2.2	\$1.0	\$0.3	\$1.2	<b>C</b>	= B ÷ A, ("Annual Production Rate" per FTE)

\* This is the FY2009 DCR Capital Budget, not just the DCR's capital construction budget.

Based on the amount of Federal Act funding requested and the FY2009 Production Rate, the additional staff needed to manage federally funded projects has been estimated on the table below.

<b>Table 2: Estimated Number of Additional FTEs Required to Manage Federal Act Funded Projects (\$s Millions)</b>							
	<b>DCAM</b>	<b>DHCD</b>	<b>DCR</b>	<b>DFG</b>	<b>MCCA</b>	<b>Ref.</b>	<b>Source</b>
Total Federal Act Request (\$s in Millions)	\$848.1	\$596.85	\$280.9	\$55.8	\$10.4	<b>D</b>	Agency Project List
Estimated Annual Federal Act Construction Production (\$s in Millions)	\$120	\$120	\$112.0	\$22.3	\$10.4	<b>E</b>	Agency determined estimation
Estimated Number of federally funded FTE @ FY2009 Annual Production Rate	58.2	54.2	115.0	70.2	8.5	<b>F</b>	= E ÷ C

Agencies will be able to leverage existing knowledge and increase efficiency for management of the additional federally funded projects, and based upon their analysis of staffing needs, the actual staff requests are lower than the estimates above.

<b>Table 3: Actual FTE Requests to Manage Federal Act Projects</b>					
	<b>DCAM</b>	<b>DHCD</b>	<b>DCR</b>	<b>DFG</b>	<b>MCCA</b>
Federally funded FTE Request Based on Agency Staffing Analysis	53	29	57.5 <sup>7</sup>	6 <sup>8</sup>	15

Assumptions for Table 1, 2 and 3:

- DCAM and DHCD assumed \$300 Million in total Federal Act funding over 2.5 years.
- DCR and DFG assumed Total Federal Act Request (D) funding over 2.5 years.
- DHCD's 20.5 FTE Request includes positions currently vacant and included in the FY2009 capital budget.

<sup>7</sup> The number of FTE requested is very low as compared to the total FY2009 capital budget for construction projects and production rate per FTE based on the current budget. DCR plans to utilize and expand existing capital programs and staff, thereby minimizing the number of new FTE needed to oversee the recommended projects.

<sup>8</sup> DFG's staffing request is modest in comparison to the total dollar amount of construction projects requested for Federal Act funding because DFG will use existing staff, and will only need to add staff on a temporary basis for the duration of time the federally funded projects are underway.

- MCCA's projects vary from three months to one year in duration. Its Estimated Annual Production (E) represents one year, and therefore the actual staff needs are higher than the Estimated Annual Production.

The detailed staffing plans provided by each agency can be found in *Appendix 5 - State Facilities and Courts*. Descriptions for how each agency derived its staffing plans are below.

### **Division of Capital Asset Management (DCAM)**

DCAM developed a workload calculator (see *Appendix 5*) to estimate staffing needs under the federal program. The staffing figures do not factor in staffing required to meet DCAM's baseline approved capital plan, which is also expanding around the several new bond bills signed by Governor Patrick in the summer of 2008.

DCAM made several key assumptions in estimating staffing needs. Namely, DCAM assumed for planning purposes receipt of \$300 million in federal money to fund capital projects. DCAM also made assumptions around the distribution of the funds among large projects, smaller repair projects, and energy projects, along with average size of project, etc. Estimates include support staff that are not directly involved in project management, however, will play critical roles in the smooth implementation of our program.

Based on these sets of assumptions, DCAM has estimated a need of 53 FTEs to manage this workload. This figure represents a mix of construction management, energy and repair planning, and support professionals across the agency. DCAM expects that most of these positions would be required for a two to three year period, perhaps longer on some of the larger projects. There may be a need to add a limited number of regular, permanent full-time employees to oversee the work of Program Manager firms. The need for permanent staffing will be evaluated closely in consultation with ANF as the actual federal workload projections become clearer.

In order to meet this need, DCAM has several large, full-service program management firms already under contract. They could provide the needed resources to directly fill most of the needed FTEs, albeit at a significantly higher cost than hiring a regular employee. Due to the tight time constraints and the time it takes to hire individuals, however, the program manager firms may be the best option, at least at the beginning of the process. Similarly, DCAM would need to rely on outside counsel to supplement in-house legal staff in construction contracting issues.

DCAM will also need to adapt a specific management structure that will help to minimize the need for training. The goal would be to utilize seasoned professionals with a firm understanding of capital construction management. These would be found via existing Program Manager firms, or through hiring of the mostly temporary positions that will be needed to manage the work. However, like any organization, particularly those where public funds are used, there are administrative structures peculiar to the state and to DCAM. DCAM's goal is to eliminate the need for extensive training in these processes for new staff coming on board to allow them to focus more on managing the actual work (either design or construction). This will be done by using existing staff that are already expert in these processes while working to streamline these processes as much as possible. For example, many of the reforms discussed under the Procurement Task Force, if implemented, would alleviate many of the administrative burdens currently placed on DCAM staff.

DCAM will not, however, completely eliminate the need for new staff to be trained. New staff will need basic orientation, and a short training program in the fundamentals of DCAM's project management system (PMAS) and metrics dashboard tracking program for design and construction.

DCAM will look to the recommendations of the Workforce Development Task Force in order to fill additional full-time positions, recognizing that the temporary nature of this initiative will require the state to minimize the use of permanent employees.

### **Department of Conservation and Recreation (DCR)**

DCR's FY2009 capital program includes over 90 projects or categories of spending. There are currently about 45 DCR staff directly involved in the management of these projects, of which 20 are full-time project managers. DCR construction contracts also provide for resident engineering services to oversee the day-to-day site activity.

In addition to the project managers, architects, planners, and resident engineers that are directly involved in overseeing and implementing capital projects, there are approximately 30 FTEs within DCR that support the agency's capital program. These staff work in the areas of Finance (11 FTE) including Capital Planning and Budgeting, Contract Administration (9 FTE), Legal Services (2 FTE), Human Resources (1 FTE), Information Technology (1 FTE), External Affairs (1 FTE), Urban and State Parks Divisions (2 FTE) and support staff to Planning and Engineering (3 FTE).

To estimate its staffing needs for the federally funded projects DCR factored in the capacity of existing staff to expand workloads as a baseline, and then estimated based on workload that a total of 57.5 additional FTEs to manage the additional workload for the dollars requested.

The majority of the new FTE positions are for Resident Engineers (44.5) to ensure tight oversight of construction projects on the group and Materials Testing for all projects. DCR estimates that for each expansion and acceleration project .25 FTE is needed and for the 25 bid-ready and new projects, which require more resources to execute, 1.5 FTE are needed.

For every three projects DCR anticipates the need for one new project manager. A total of 10 new Project Managers are requested if all projects recommended are funded. Additionally, 1 FTE is requested for overall project tracking and reporting, and one administrative support position is requested.

### **Department of Fish and Game (DFG)**

DFG will contract most work to private contractors for individual projects, but will need a modest number of new project management, engineering and administrative staff to effectively oversee and manage the \$56 million in construction projects requested for Federal Act funding. Most of this staff would be housed in the Office of Fishing and Boating Access, which is responsible for the department's engineering needs as well as its own boating and fishing access projects.

DFG proposes six new staff positions to support project management and oversight. One project manager is requested to oversee the DFG employees working on this effort, the private contracts, and the work of the private contractors. Four engineers / engineering aides to oversee the day-to-day construction projects and one administrative support position will be needed to manage the project tracking and reporting, finance and procurement.

### **Department of Housing and Community Development (DHCD)**

Since the beginning of the Patrick Administration, DHCD's capital program has nearly doubled in dollar volume and also in the number of projects. In FY2007, DHCD oversaw \$50 million in construction and issued 90 Notices to Proceed (NTP). In FY08, DHCD's dollar volume jumped to \$90 million (not including another \$20 million leveraged through mixed finance) and 163 NTP's were issued.

Currently, the Bureau of Housing Development and Construction (BHDC), within DHCD, oversees roughly 600 capital projects, ranging in size from \$25,000 to \$20 million. While the size of the project dictates different levels of oversight, all projects require basic administrative project management functions (grant funding contract, design procurement and contracting, construction contractor procurement and contracting, contractor billing due diligence and payment processing, etc.) and are assigned a project manager to perform these. Project managers oversee roughly 75 projects/person. All projects over \$100,000 have a staff architect and/or engineer and construction advisor assigned

as well. The architects and engineers are licensed professionals who review drawings at multiple stages of design, while the construction advisors inspect construction as it proceeds. In addition, this Administration also began a program development unit to generate innovative program approaches that increase the productivity and effectiveness of the unit. The key functions within this unit are mixed-finance, sustainability and capital planning/formula funding-allocation systems.

BHDC is making efforts to improve the productivity of the Bureau through better use of technology and reassignment of certain kinds of administrative functions to clerical staff, but that will not reduce the need for and value of professional review and oversight. Several baseline positions are vacant at this time and the current level of production is unsustainable without refilling those positions. To estimate staffing needs for the Federal Act, BHDC assumed a baseline staff level of 47—the 41 current staff complement plus 6 positions where the right to backfill through BHDC's current capital plan has been requested. If those positions are not filled, the estimated number of new positions needed to manage the federally funded projects will increase by that same amount.

To determine staffing needs to support the federal funding, BHDC evaluated each category of proposed projects and devised an implementation strategy designed to leverage current internal capacity and to make maximum use of the capacity of BHDC partners in the Local Housing Authorities:

- Projects to accelerate the existing pipeline. These projects have two aspects: 1) accelerating the pace which was artificially slowed to meet limited bond cap; and 2) increasing the scope to both its logical conclusion (eliminate budget-driven phasing) and add every possible sustainability enhancement. All of these projects already have project managers and designers, so can be managed efficiently with current staff plus a small supplement. These additional 263 fast-tracked projects are estimated to require two additional Project Managers plus one additional architect, one engineer and one construction advisor (all temporary but for the life of the projects).
- Projects identified as Mixed-Fi Equity Replacement are included in the current capital pipeline list and will not require additional staffing.
- Strategic Sustainability Projects will be accomplished in different ways, depending on the type of project. Staffing needs will be quite different than that of typical grant-funded modernization projects. Replacement of existing fixtures or appliances with high-efficiency components will be done through a state-wide purchase and distribution process which should only require a single dedicated Project Manager (Sustainability Project Assistant). The Solar-ready roof projects will be accomplished by a specialized technical advisor acting as both technical reviewer and Project Manager. The regional ESCO projects will be handled by the Sustainability Program Developer and Local Housing Authorities as they are now.
- The next group of projects: LHA Delegation, Code/Life Safety and Vacant Unit re-occupancy will be largely managed by the LHAs themselves – a departure from DHCD's normal way of handling projects but one for which DHCD has been preparing and experimenting with for about a year. These are relatively small projects and each will require the attention of a project manager for down project funding contracts. The increased Project Management load for this class of projects is estimated to require three additional Project Managers (250-300 projects can be managed by each), Design and construction oversight will be largely delegated to "House Doctor" designers but strict adherence to DHCD design guidelines and standards will be required and monitored, requiring an additional Engineer FTE and two more Construction Advisors.
- Comprehensive modernization. This is by far the most cost-effective and intelligent approach to restoring those developments in the portfolio with major backlogs of deferred maintenance spanning the full range of building systems and components, but limited bond cap normally makes this impossible for all but the most neglected developments. There are a few projects that have been planned for some time but effectively cancelled under the new Formula

Funding program. Those which can be bid and underway within 180-days will be resurrected as the only opportunity (outside of this administration's bold new mixed-finance program) for making developments capital-needs-free for the next 20 years. DHCD will need one project manager, an architect, part of a mechanical engineering FTE and one new construction advisor to accomplish these resource-intensive projects.

- Finally, this number of projects will require a substantial accounting effort to create, track and maintain the documents needed to manage the flow of funds to the LHA in a timely manner. DHCD is working on ways to use technology and groupings of projects to minimize this need but expects that, at a minimum, it will require at least seven (temporary) FTEs in administrative, clerical and accounting roles to handle all of the necessary documentation.

In total, 29 new staff are needed to support the federally funded projects.

### **Massachusetts Convention Center Authority (MCCA)**

All four MCCA projects will be managed day to day by Tishman Construction Corporation of MA. Tishman is under contract with the MCCA to provide services as the Owner's Project Manager. This is a function that is mandated by statute for any State Funded building project valued at \$1,500,000 or more. Two of the four submitted projects cost in excess of \$1,500,000. MCCA plans to assign Tishman responsibility to manage the design and construction projects under the direction of MCCA's construction management and legal Teams. MCCA anticipates the need for 15 staff from Tishman to oversee the projects submitted for federal funding.

MCCA has engaged Simpson, Gumpertz, and Heger, Inc., our "House Doctor" who is under contract through November 2010 to provide designer services on a wide range of construction and facility improvement projects. MCCA estimates 38 design staff will be needed to deliver the four projects it has recommended.

### **Administrative Office of the Trial Court (AOTC)**

Projects submitted by the AOTC have been included in DCAM's project submission list and will largely fall under their management. To support their oversight and management of the projects, AOTC has identified their staffing needs for projects below and above \$1 million. In total, based on the approximately \$84 million dollars in projects DCAM has recommended for funding by the Federal Act, AOTC anticipates the need for nine additional staff persons.

## **7. Barriers and Obstacles to Achieve Objectives**

The task force identified a number of barriers and obstacles during preparation of this report. These barriers and obstacles, and their accompanying mitigation strategies/actions required, are described in the table below.

<b>Barrier / Obstacle</b>	<b>Mitigation Strategy / Actions Required</b>
<b>Delegation</b> Although it could help to increase capacity to carry out projects, reliance on state agencies or local authorities to manage projects through delegated authority from DCAM/DHCD (overseeing agencies) could increase the risk that projects are not commenced and completed in a timely and cost effective manner.	Increase oversight of delegated projects by including more direct project management by DCAM and DHCD via bundling of smaller projects. Each overseeing agency will also provide additional training to client agencies to help them in construction, procurement and oversight. Utilize the resources of outside program management firms to directly assist in managing smaller projects, either supplementing overseeing agency staff, or providing help directly to client agencies.

Barrier / Obstacle	Mitigation Strategy / Actions Required
<p><b>Conflicting Federal and State Requirements regarding Accessibility Standards</b> Different standards for accessibility requirements at the federal and state levels contribute to delay of projects and could thereby prevent projects consistent with the task force's objectives from being eligible for funding under the federal program.</p>	<p>Each agency will work with the state Architectural Access Board (AAB) to allow projects that trigger accessibility upgrades to move ahead within the 180 day window for the non-access work. In addition, each agency will commit to complete the required access work within a 2 year period to be funded through federal funds and work to get federal agreement that state AAB requirement govern, and that AAB can be the oversight agency.</p>
<p><b>Time Delay for Design*</b> There are a number of projects that are consistent with and that would significantly further the task forces' objectives that might not meet the "ready-to-go" standard for funding eligibility under the federal program due to the time necessary for design of the project.</p>	<p>Phase such projects if work on certain aspects of the projects could begin within 180 days while design of the larger project is underway. Also, make changes to procurement laws that will speed design process for simpler, smaller projects.</p>
<p><b>Contractor Certification/Prequalification Requirements*</b> There are certification and prequalification requirements that must be met for contractors to be able to participate in bidding for public projects. The concern is that these requirements will limit the world of qualified bidders available to bid on projects under the federally funded program and make it difficult to get contractors and/or increase costs.</p>	<p>Contractor Associations and public agencies responsible for certifying/prequalifying bidders will engage in a proactive effort to notify contractors of the opportunity for work and to assist them in getting certified/prequalified. Public agencies will also identify opportunities to streamline the certification/prequalification process. Implement the Condensed Prequalification Process proposed by the Procurement Task Force.</p>
<p><b>Time Delay for Safety Inspections/Permits*</b> There might be projects that could further the objectives of the task force but that might not meet the "ready-to-go" standard for funding eligibility under the federal program if delayed due to safety inspection and/or permit requirements. This issue is compounded for projects delegated to local housing authorities or that otherwise require inspections/permits from municipalities or multiple public agencies.</p>	<p>Work with the Administration, the Department of Public Safety, the Secretary of State's Office, and other stakeholders to ensure that adequate resources are in place to prevent unnecessary delays. Ensure that the staffing requirements for the Department of Public Safety and other recommendations outlined in the Permitting Section of this report are implemented.</p>
<p><b>Available Designers</b> The time for preparation of design documents due to a limited capacity of the designers to produce the documents and agency staff to review them may reduce the number of projects which will be eligible under the Federal Act.</p>	<p>Expand the pool of available designers by increasing the number of designers who are qualified as House Doctors and doing outreach to the design community to get new firms interested in the work. Create a complete set of design guidelines and standards which designers can use so agency reviews are more of an oversight audit rather than a detailed review.</p>
<p><b>Time To Procure the Construction Contractor*</b> The time to procure the construction contractor varies by the size and complexity of the job. Making the procurement process more</p>	<p>Implement the recommendations outlined in the Procurement Section of this report, particularly recommendations to increase the thresholds for using sound business practices and soliciting verbal quotes and an expedited bid protest</p>



Barrier / Obstacle	Mitigation Strategy / Actions Required
efficient will ensure the maximum number of projects will be eligible for Federal Act funding.	process. Increased thresholds will greatly accelerate the completion of these jobs and the number that can be done within the required timeframe.
<b>Contractor Capacity*</b> Contractor capacity may be a barrier with respect to smaller projects so long as performance and payment bonds are required for small jobs that do not otherwise require DCAM-certified contractors.	Consider implementing recommendations outlined in the Procurement Section of this report such as raising the threshold for bonds. Also consider holding informational and training sessions with contractors and subcontractors who do not normally bid on public work in order to increase their opportunities and bidding competition.
<b>Revised Building Code</b> Building Code revisions effective March 1, 2009 may affect the timely issuance of building permits for projects that were designed under the Sixth Edition of the Building Code.	<ul style="list-style-type: none"> <li>There are two ways in which the Department of Public Safety can remedy potential delays caused by new Building Code Revisions: <ul style="list-style-type: none"> <li>Applicant may apply for variances from the Building Code Appeals Board (BCAB).</li> <li>Members of the Board of Building Regulations and Standards may consider an extension of the concurrency period so that permit applicants may continue to design and build to the Sixth Edition of the Code.</li> </ul> </li> </ul>

\*For more information on Permitting, Procurement and Workforce, please see *Section III*, Cross-Cutting Task Force Overview

## 8. Metrics for Measuring Success

Agencies must measure their success in meeting the objectives for state facilitate and court projects funded under the Federal Act and in delivering each project consistent with quality, time and cost expectations. To ensure this important level of accountability and transparency, agencies should measure and report on the following metrics.

### Metrics

Metric	Description	Method for Monitoring / Measurement
<b>Jobs</b>	Number of jobs created and duration for which they were created by each project funded.	<ul style="list-style-type: none"> <li>Develop a system for tracking and analyzing total workers onsite per day through certified payroll or daily field reports; develop other methods to track indirect employment (e.g., income multipliers).</li> </ul>
<b>Facilities condition</b>	Number of facilities improved and measurement of extent of improved condition based on Facilities Condition Index (FCI).	<ul style="list-style-type: none"> <li>FCI = (Total Cost of Repair Backlog/Total Replacement Cost); <ul style="list-style-type: none"> <li>DCAM uses CAMIS database</li> <li>DHCD uses Capital Improvement database</li> </ul> </li> <li>Number of projects removed from the Pending Capital Replacement Project</li> </ul>

		list.
<b>Long-term benefits</b>	Administration infrastructure investment priority or priorities furthered; state agency core functions, missions and/or long-term programmatic goals furthered in some material and measurable way.	<ul style="list-style-type: none"> <li>• Work closely with the client agency through the analysis of operational improvements in terms of quality and quantity pre and post capital project.</li> <li>• Evaluate the long-term impacts through the number of people served by the facility improvement.</li> </ul>
<b>Efficiencies</b>	Operating savings achieved through energy efficiency projects.	<ul style="list-style-type: none"> <li>• Track the facility operating costs pre and post capital project.</li> <li>• See the Energy Task Force section for specific energy efficiency metrics.</li> </ul>
<b>Diverse Benefits</b>	<p>Measure the geographic diversity of the investments.</p> <p>Number of different state agencies benefitted; number of different state companies benefitted; number of different trades benefitted; number of different communities benefitted.</p>	<ul style="list-style-type: none"> <li>• Number of state agencies</li> <li>• Number of companies in-state</li> <li>• Number of trades</li> <li>• Number of cities/towns</li> </ul>
<b>Project Delivery</b>	Actual federally funded project delivery milestones and cost vs. federally funded projected schedule and budget.	<ul style="list-style-type: none"> <li>• Track schedule and budget performance against established metrics through web based cost control systems (Prolog, Expedition, MMARS, etc).</li> </ul>
<b>Change Orders</b>	Change orders as a percentage of Federal Act development cost.	<ul style="list-style-type: none"> <li>• Limit total non-owner driven change orders to less than 10% of project cost.</li> </ul>

## Transportation Task Force

### 1. Introduction

The Transportation Project Delivery Task Force was established to provide guidance to Governor Patrick with respect to the following:

1. Development of transportation project and program proposals,
2. Strategies to ensure project readiness,
3. Approaches to project prioritization, and
4. Identification of impediments to project delivery.

The Task Force membership included the following members of the Mobility Compact:

- Executive Office of Transportation (EOT)
- Massachusetts Highway Department (MassHighway)
- Massachusetts Bay Transportation Authority (MBTA)
- Massachusetts Aeronautics Commission (MAC)
- Massachusetts Association of Regional Transit Authorities (MARTA)
- Massachusetts Turnpike Authority (MassPike)
- Massachusetts Port Authority (Massport)
- Department of Conservation and Recreation (DCR)
- Woods Hole, Martha's Vineyard and Nantucket Steamship Authority (Steamship Authority)

In addition to the Mobility Compact agencies, the Task Force included more than a dozen business and advocacy stakeholder groups. The full membership of the Task Force can be found in Section 2.

The first meeting of the Task Force was held on December 22, 2008, after which it met weekly on Tuesdays until January 20, 2009. All meetings were held at the Massachusetts State Transportation Building at 10 Park Plaza, Boston. In addition to the weekly opportunity to provide input on the issues being considered by the Task Force, members were also encouraged to submit comments to the Task Force at any time, and many did provide memos or forward journal articles to advocate for a particular strategy for addressing these issues. Task Force participation was outstanding and many hours of thoughtful and helpful input was provided by the Task Force members. The Task Force Chair, Undersecretary and Chief Operating Officer Jeffrey Mullan, and his staff were ultimately responsible for developing recommendations to the overall Operation Recovery effort.

EOT's Office of Transportation Planning established the Mobility Compact Operation Recovery Technical Committee (MCORTC), consisting of the Mobility Compact members, to delve deeper into the details of project readiness and budgets, as well as other project information requests of Task Force staff. The MCORTC played a critical role in identifying both challenges to implementing a large program of investments on an accelerated schedule, and the necessary agency-specific tasks for overcoming these impediments.

The Task Force ultimately helped identify a list of 451 projects and programs for implementation by member agencies of the Mobility Compact. The Task Force focused first on projects that could be

made ready to go quickly, focusing on milestones of 90-days and 180-days as well as those that could be ready within 1-and 2-year time frames. The definition for readiness was the issuance of "Notice to Proceed (NTP)." This implies a signed contract with encumbered funds, whether for construction, procurement, or contractor services.

The table below provides a high-level breakdown of the projects by implementing agency and whether they would be ready to go within 180 days or between 180 days and two years.

Agency	Total 180-Day Project Count	Total Federal Act Requested (Millions)
MassHighway	47	\$419.8
MBTA	35	\$785.5
MAC	51	\$35.2
RTAs	19	\$137.8
MassPike	21	\$56.8
Massport	16	\$122.7
DCR	29	\$251.0
Steamship Authority	3	\$8.1
EOT	16	\$122.8
<b>TOTAL</b>	<b>237</b>	<b>\$1,939.7</b>

Agency	Total Two-Year Project Count	Total Federal Act Requested (Millions)
MassHighway	143	\$1,062.9
MBTA	52	\$1,008.1
MAC	77	\$118.7
RTAs	21	\$152.8
MassPike	69	\$183.3
Massport	29	\$299.5
DCR	42	\$330.7
Steamship Authority	3	\$8.1
EOT	15	\$131.1
<b>TOTAL</b>	<b>451</b>	<b>\$3,295.2</b>

## 2. Members

Name	Title	Agency / Organization
Mullan, Jeffrey (Chair)	Undersecretary and Chief Operating Officer	Executive Office of Transportation and Public Works (EOT)
Anderson, David	Deputy Chief Engineer for Design	MassHighway
Bachrach, George	President	Environmental League of Massachusetts
Bain, Rachel	Planner	EOT Planning
Bench, Clinton	Deputy Director	EOT Planning
Bolling, Bruce	Executive Director	MassAlliance
Branger, Amy	Chief of Staff	EOT
Brennan, Tim	Executive Director	Massachusetts Association of Regional Planning Agencies
Bresnahan, Guy	EOT Ombudsman	EOT Planning
Cavicchi, Peter	Assistant Chief Engineer	MassPike
Collura, John	Professor of Civil Engineering and Director	University of Massachusetts Transportation Center
Darov, Anatoly	President	Boston Society of Civil Engineers
Dimino, Rick	President and CEO	A Better City
DiPaolo, Tom	Assistant Chief Engineer	MassHighway
Dorant, Joe	President	Massachusetts Organization of State Engineers and Scientists
Draisen, Marc	Executive Director	Metropolitan Area Planning Council
Ernst, Helmut	Chief Engineer	MassPike
Feher, Matthew	Senior Legislative Analyst	Massachusetts Municipal Association
Garcia, Denise	Manager of Aviation Planning	Massachusetts Aeronautics Commission
Goodman, Abby	Executive Director	American Council of Engineering Companies
Gupta, Vineet	Director of Planning	Boston Transportation Department
Hamwey, Scott	Consultant	Planners Collaborative
Hart, Christopher	Project Director – Urban Design and Transportation	Adaptive Environments
Jessen, Klark	Director of Communications	EOT
Kolesar, Mary	Senior Analyst	Office of Inspector General
Lamson, Wayne	General Manager	Steamship Authority
Leary, Andrea	Consultant	Transportation Management Association representative

Name	Title	Agency / Organization
Leiner, Craig	Deputy Director	Massport Surface Transportation
Leroux, Andre	Executive Director	Smart Growth Alliance
Luberoff, David	Executive Director	Rappaport Institute for Greater Boston – Harvard University
Lynds, Cathy	Manager of Sustainable Programs	EOT Planning
Marlow, Ron	Assistant Secretary for Access and Opportunity	Administration and Finance
Matthews, Paul	Executive Director	495/Metrowest Partnership
Meservy, John	Director of Capital and Facilities Planning	Partners Health Care
Mohler, David	Deputy Secretary	EOT
Murray, Jack	Deputy Commissioner	Department of Conservation and Recreation
Nally, Thomas	Planning Director	A Better City
Noel, George	Director of Labor	Executive Office of Labor and Workforce Development
Orsino, Jeannette	Executive Director	Massachusetts Association of Regional Transit Authorities
Palmer, Bill	Planner	EOT Planning
Pourbaix, John	Executive Director	Construction Industries of Massachusetts
Quinones, Susan	Director of Interagency Affairs	EOT
Richards III, Lowell	Chief Development Officer	Massachusetts Port Authority
Robertson, John	Deputy Legislative Director	MMA
Rudikoff, Angela	Director of Civil Rights	EOT
Russell, Carrie	Staff Attorney	Conservation Law Foundation
Shaw, Al	Director of Interagency Affairs	MassHighway
Smith, Robb	Director of Policy and Planning	Executive Office of Labor and Workforce Development
Stepter, Trellis	Director of Governmental Affairs	EOT
Stern, Wendy	Undersecretary of Planning and Programs	EOT
Sullivan, Jake	Federal Relations	City of Boston
Sullivan, Tim	Legislative and Communications Director	AFL-CIO
Tinlin, Tom	Commissioner	City of Boston Transportation Department
Waaramaa, Eric	Deputy Director, Financial	Massachusetts Bay Transportation

Name	Title	Agency / Organization
	Planning	Authority
Wallace, David	Director of Apprentice Training	Executive Office of Labor and Workforce Development
Whitmore, Toni	Director of Community Relations	EOT

### 3. Key Objectives for the Transportation Project Delivery Task Force

The Transportation Project Delivery Task Force's main objective was to provide a work plan (this chapter) to the Governor that identified a list of transportation infrastructure and program investments, based on the readiness criteria that would both contribute to the revival of the Commonwealth's economy (and in conjunction with similar efforts in other states, territories, and the District of Columbia, the nation's), and also help position the Massachusetts transportation system to meet the needs of the future. The Task Force was asked to develop both strategies to ensure project readiness and approaches to project prioritization, as well as identify and address any gaps or barriers that may impede the prompt expenditure of available Federal funds. In the course of developing this work plan, the Task Force was also charged with gathering a consistent set of information (detailed description, project location, cost and cash flow, implementation schedule and readiness, and responsible agency) for all prioritized projects.

For a number of reasons, the planning and programming of transportation investments typically requires a long lead time. The environmental permitting process is often triggered by even relatively small transportation projects. Since most projects are implemented within existing travel corridors in use by the general public, safety and construction staging issues require considerable forethought. The stable and reasonably predictable flow of available funding for transportation investments creates a climate where project design work is targeted for completion to coincide with the availability of project funding—there is no large backlog of fully-designed projects that could be implemented should money suddenly become available. Therefore, now that new money, as described in the Federal Act, may be available for the implementation of new projects and programs, the Task Force out of necessity focused its initial work on identifying those projects that were ready for implementation.

The obvious goal of any Federal economic stimulus bill is to support new economic activity, primarily through the creation of new jobs as well as the retention of existing jobs. Given the seriousness of the current economic crisis, the Task Force has operated under the assumption that the funds allocated in the Federal Act, or at least a sizable portion of them, will be spent on "shovel-ready" projects that can be implemented within 180 days. For the purposes of evaluating project readiness, the Task Force considered projects to be ready within 180 days if a notice to proceed (NTP) could be given within 180 days. Since the Task Force was also able to identify a number of other projects that would advance the other important goals described in this section, projects requiring a somewhat longer implementation lead time (up to two years for an NTP) were also evaluated and, where appropriate, included in this work plan.

It is important to note that throughout the work of the Task Force, a parallel process has been underway in Congress and at the United States Department of Transportation (USDOT). EOT Staff and Task Force members have been in regular communication with elected officials and with the regional offices of both the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA). This has meant that terms such as "shovel-ready", NTP, "obligate", advertisement/bid date, award date, etc. have been evolving. As these terms are better defined in the forthcoming Federal Act and additional Federal guidance, the list of projects is likely to change.

## Governor's Guiding Principles

Governor Patrick asked the Task Force to ensure that the prioritized investments identified in the work plan be consistent with a set of Guiding Principles for Operation Recovery. These principles are described in the table below.

Guiding Principles	Description
<b>Invest for the Long Term</b>	All projects under this program should have a long-term benefit, in addition to the stimulus effect of putting people back to work now.
<b>Limit Impact on Operating Budgets</b>	Prefer investments that will reduce – or at least not add to – demands on the operating budget.
<b>Follow Established Infrastructure Priorities</b>	Make choices based on the infrastructure recommendations recently approved at the Development Cabinet.
<b>Diversify</b>	Subject to whatever constraints there may be in the Federal Act, prioritize projects for funding in a manner that ensures funds will be allocated across a variety of industries and geographic locations.
<b>Buy Massachusetts</b>	To the extent possible, contract with Massachusetts contractors, purchase goods and services from Massachusetts companies, and hire Massachusetts people.

The projects and programs identified in *Section 5* of this chapter are consistent with these five Guiding Principles to the extent possible. All of the infrastructure investments recommended by the Task Force represent long-term investments that will enhance the mobility of both people and goods in the Commonwealth well beyond the duration of the current recession. Although some of the recommended investments feature minor increases in operating budgets, these are balanced both by the positive impacts they have for the Commonwealth's economic competitiveness and the overall reduction in operating budgets realized should all of the Task Force's recommendations be implemented.

While not all of the Development Cabinet's infrastructure priorities (see *Appendix 1*) are directly relevant to transportation, the Task Force's program of investments is consistent with those that are. Although an analysis for the full list of recommendations has not been conducted, 45 of the 235 projects that could be ready to go within 180 days are located within gateway plus cities. All of the projects and programs in *Section 5* promote mobility and congestion reduction.

The list of projects reflects the diversity of transportation needs in the Commonwealth. Geographically, the list includes projects from each of Massachusetts' 13 regional planning districts, and the majority of the Commonwealth's 351 cities and towns. Of those projects that can be ready to go within 180 days, 32 are located in regionally designated low-income census tracts and 55 are located in regionally designated minority census tracts. The list also features projects and programs covering the range of modes and facility types represented in Massachusetts—roadways, passenger and freight rail lines, local and express buses, rapid transit services, bicycle and pedestrian facilities, airports, and seaports.

The implementation of the Task Force's recommendations will immediately and significantly address the central goal of the Federal Act—the creation of jobs. Approximately 24,000 jobs are estimated to be created by the \$1.9 billion in projects that will be ready by August 31, 2009. This estimate will change with the ultimate amount available through the Federal Act. The jobs will overwhelmingly be filled by residents of the Commonwealth. The architecture, engineering, and construction sectors in



Massachusetts have a proven track record of meeting the challenge of providing the labor needed to implement large-scale infrastructure construction projects.

Many of the recommendations, particularly programmatic ones like the Transit Customer Service Improvement Program, feature technical elements that must draw on the talents of a highly skilled and knowledge-based workforce, one that is readily and uniquely available in Massachusetts. There could also be a number of public agency staff positions filled by the implementation of the Federal Act. These new jobs—primarily in project delivery and oversight roles—would largely be filled by Commonwealth residents. And while the manufacture of materials and equipment implied by these recommendations (vehicle procurements, construction equipment, asphalt, steel, etc.) will primarily occur outside of Massachusetts, the Commonwealth is well positioned to “export” our own residents’ skills and services to other states’ implementation of economic stimulus funded projects and programs.

### Task Force Guiding Principles and Criteria

The Task Force determined at the outset of its work that the timing of the Federal Act was fortuitous given the recent completion of the first phase of EOT’s strategic planning effort—*youMove Massachusetts*. Phase one of this effort included an extensive statewide civic engagement process with the goal of identifying mobility gaps and challenges experienced by users of the Commonwealth’s transportation system. The product of this public-driven process, which collected more than 700 individual comments, was the development of ten organizing themes to guide the prioritization of future infrastructure and programmatic investments (the objective of *youMove Massachusetts*’ upcoming second phase). The development of these themes in November 2008 provided the Task Force with an opportunity to inform the identification of recommended investments with input from a recent and extensive civic engagement campaign.

## 4. “Shovel-Ready” Projects

The Task Force determined at the outset of its work that the timing of the Federal economic stimulus bill was fortuitous given the recent completion of the first phase of the EOT’s strategic planning effort—*youMove Massachusetts* ([www.mass.gov/youmovemassachusetts.org](http://www.mass.gov/youmovemassachusetts.org)). Phase one of this effort included an extensive statewide civic engagement process with the goal of identifying mobility gaps and challenges experienced by users of the Commonwealth’s transportation system. The product of this public-driven process, which collected more than 700 individual comments, was the development of ten organizing themes to guide the prioritization of future infrastructure and programmatic investments (the objective of *youMove Massachusetts*’ upcoming second phase). The development of these themes in November 2008 provided the Task Force with an opportunity to inform the identification of recommended investments with input from a recent and extensive civic engagement campaign.

Although the projects were not specifically prioritized for this report, the Task Force identified several important considerations for advancing projects under the stimulus program. In addition to the time-sensitive measures related to the issuance of a contract notice to proceed (NTP). The Task Force considered two other criteria when evaluating projects and programs. The first was for modal diversity. Provided that eligible projects existed for each mode (highway, fixed route public transportation, paratransit, bicycle, pedestrian, water, air and freight) the Task Force agreed that all modes should be represented in the package of recommendations. The second related to cash flow.

The *youMove Massachusetts* themes along with the criteria identified by the Task Force are listed and described in the table below.

Evaluation Criteria	Description
Notice to Proceed within 180 days	Responsible agency could give a notice to proceed on a

Evaluation Criteria	Description
	contract to begin implementation within 180 days (by August 2, 2009)
Notice to Proceed within two years	Responsible agency could give a notice to proceed to begin implementation within two years (by February 1, 2011)
Modal Diversity	Ensure that all modes of travel are represented in the ultimate program of recommended projects
Cash Flow	All else being equal, favor those projects with front-loaded expenditures that would result in more jobs or economic activity earlier in their implementation schedule
youMove Massachusetts (YMM) Theme 1: Improve Transportation System Reliability	Prioritize projects that help to minimize travel delays and result in more consistent travel times.
YMM Theme 2: Focus More Attention on Maintaining our Transportation System	Prioritize projects that can extend the useful life of assets.
YMM Theme 3: Design Transportation Systems Better	Prioritize projects that modernize the design of existing assets.
YMM Theme 4: Encourage Shared Use of Infrastructure	Prioritize projects that facilitate the sharing of rights of way among multiple modes.
YMM Theme 5: Increase Capacity by Expanding Existing Facilities and Services	Prioritize projects that expand transportation capacity, both through the more efficient management of existing corridors and through new capital investments.
YMM Theme 6: Create a More User-Friendly Transportation System	Prioritize projects that make information more accessible to system users and make the travel experience more comfortable and welcoming.
YMM Theme 7: Broaden the Transportation System to Serve More People	Prioritize projects that broaden transportation services to serve more and different users in new locations.
YMM Theme 8: Provide Adequate Transportation Funding and Collect Revenue Equitably	In an era when our transportation funding falls far below our needs, it is imperative that both new funds and new efficiencies be identified, and that the burdens placed on system users is fair and appropriate.
YMM Theme 9: Minimize Environmental Impacts	Prioritize projects that make our transportation system more environmentally sustainable.
YMM Theme 10: Improve Access to our Transportation System	Prioritize projects that provide more and better access to our transportation system.

## 5. Projects (180-days)

The projects presented below are organized into eight categories and related initiatives. A detailed table containing all of the projects is presented in *Section IV Project List*.

Categories and Initiatives (180-Days)	Projects	Total Federal Act Requested (Millions)
<b>Access to Transit</b>		
Elevator Installation	1	\$7.7
Platform Upgrade	2	\$14.7
<b>Subtotal</b>	<b>3</b>	<b>\$22.4</b>
<b>Asset Maintenance and Improvement</b>		
Airport Infrastructure and Safety Improvement	28	\$59.9
Bridge Rehabilitation and Replacement	19	\$264.5
Bridge Deck Reconstruction	1	\$14.0
Interstate Highway Maintenance	2	\$23.8
Other	8	\$165.2
Road Resurfacing	30	\$100.8
Roadway Safety	8	\$14.5
Runway Resurfacing	29	\$24.7
Streetscape	3	\$5.6
Subway and Commuter Rail Station Upgrade	5	\$66.6
Transit and Highway Facility Improvement	13	\$73.5
Water Transportation Enhancement	16	\$99.6
<b>Subtotal</b>	<b>161</b>	<b>\$892.7</b>
<b>Capital Equipment Acquisition</b>		
Bus, Maintenance Vehicle and Van Acquisition	5	\$88.2
Computer and Technical Hardware Upgrade	11	\$53.3
Locomotive / Coach Acquisition	3	\$260.0
<b>Subtotal</b>	<b>19</b>	<b>\$401.5</b>
<b>Congestion Relief</b>		
Interchange Reconstruction	1	\$38.8
Intersection/Roadway Reconstruction/Improvement	7	\$91.5
Rail Double Track Construction	4	\$92.0
Rail Track Rehabilitation	6	\$76.0
Railroad Grade Crossing Improvement	1	\$7.6
Railroad Signal System Upgrade	4	\$124.4
Signal Modernization	1	\$4.6

Categories and Initiatives (180-Days)	Projects	Total Federal Act Requested (Millions)
<b>Subtotal</b>	<b>24</b>	<b>\$434.8</b>
<b>Customer Service Enhancement</b>		
Other	6	\$52.3
Wayfinding / Signage	11	\$38.4
<b>Subtotal</b>	<b>15</b>	<b>\$70.7</b>
<b>Rail Infrastructure Assistance</b>	<b>1</b>	<b>\$25.0</b>
<b>Safe Routes To School</b>	<b>5</b>	<b>\$13.8</b>
<b>Statewide Trails</b>	<b>7</b>	<b>\$58.8</b>
<b>TOTAL</b>	<b>237</b>	<b>\$1,939.7</b>

## 6. Agency Staffing Plans

The following table provides a summary snapshot of the staffing needs discussed in more detail throughout this section.

Federally funded FTE Request Based on Agency Staffing Analysis	MassHighway	MBTA	MAC	RTAs	MassPike	Massport	DCR	Steamship Authority	EOT
<b>180-Day Ready</b>	172	0	6	0	0	0	*	0	1
<b>Two Year Projects</b>	172	0	6	0	0	0	**	0	1

\* See also Section II, State Facilities and Courts Task Force Report

\*\*Includes 180-day projects

The following discussion of staffing plans reflects the means by which each agency procures goods and services, which vary considerably. The transportation agencies that comprise the Mobility Compact include 19 authorities (MTA, Massport, MBTA, the Steamship Authority, and the fifteen regional transit authorities represented by MARTA). MassHighway and the Massachusetts Aeronautics Commission are within EOT and DCR is within EOEA. In addition, MAC oversees 37 public use airports and other facilities. Some of these agencies (MassHighway, MBTA, MassPike, and Massport) regularly oversee large-scale capital projects directly while others have small staffs that rely upon outside contractors.

### Agencies with Considerable Staffing Needs

Because MassHighway is overseeing a large program of construction projects in part due to the Accelerated Bridge Program (ABP), the addition of projects due to the Federal Act would trigger the need for considerable additional staffing resources. Based upon input from Project Management,

Environmental Services, Right of Way, and Construction, it is estimated that MassHighway will need staffing support of approximately 172 people for its \$419 million 180-day program. This estimate is based on input from project development and construction staff.

In both pre-construction and construction activities, it is critical to note that the number and complexity of projects can result in dramatic variations in staffing requirements. For example, resurfacing projects within MassHighway-owned right of way required far less staffing than roadway reconstruction projects in municipalities, which have longer pre-construction planning and permitting requirements and usually involved right-of-way acquisitions. Furthermore, since highway funds provided by the Federal Act must be spent in accordance with Title 23 USC, strict FHWA oversight is required. This FHWA oversight requires MassHighway to retain adequate qualified staff to manage and oversee design and construction work. Failure to meet FHWA staffing expectations could result in the withholding or forfeiture of all federal highway funds -- not just new stimulus funds.

### Agencies with Modest Staffing Requirements

EOT would require small staffing increases to oversee project procurements associated with some programmatic elements as well as project management staff to oversee the additional rail projects.

DCR's staffing needs will depend in part on the form of the transportation funding. The roads, shared use path, and bridge projects may be implemented by MassHighway, which would have a formula similar to the staffing requirements above. DCR's analysis for the *State Facilities and Courts Task Force Report* identified the need for approximately 57.5 staff for \$280 million in projects funded by the Federal Act. This included ongoing projects to be accelerated and new projects.

MAC would require an additional six engineers to implement its identified projects for the 37 public-use general aviation airports throughout the Commonwealth. Currently, MAC has two engineers. The responsibilities of these engineers would include the following: 1) Limited design scoping with the airports and their respective consultants; 2) Reviewing project cost estimates, plans, specifications, and bid documents; 3) Performing field inspections at the airports; 4) Reviewing and approving all payment vouchers, as-built plans, and project close-out documentation.

### Agencies with Staff Capacity

The MBTA, MARTA, MassPike, and Steamship Authority each have either sufficient in-house staffing or the contract vehicles in place to hire consultants to perform the needed project management oversight and procurement.

## 7. Barriers and Obstacles to Achieve Objectives

The Mobility Compact Agencies will design and construct projects and procure equipment with the funds made available by the Federal Act. This will result in pressures in a range of areas. Mobility Compact Agencies were interviewed about their proposed approach to implementation. There are several common themes, as well as agency-specific concerns to be addressed.

Barrier / Obstacle	Mitigation Strategy / Actions Required
<b>Procurement</b> The procurement process is lengthy in many agencies. Hiring contractors for pre-construction or construction services takes a long time and can only be expedited as internal resources permit.	See recommendations of Procurement Task Force
<b>Hiring</b> Hiring new staff to work at the agencies is also lengthy. Once employees are on-board,	Utilize temporary positions to hire former employees and others to assist with project development and other pre-contract activities.

Barrier / Obstacle	Mitigation Strategy / Actions Required
<p>they need to be trained. This means that there is a lag between the advertisement of a position opening and the ability of the new hire to contribute effectively to the agency's project work. As a result of the completion of contract work for the CA/T project at the end of 2008, there may be hiring opportunities among the staff who previously worked on those contracts.</p>	<p>Consider use of outside placement agency for new hires.</p> <p>For additional actions, see recommendations of Work Force Task Force.</p>
<p><b>Work Flow</b></p> <p>It is essential that the advertisement of projects be staggered so that contractors have adequate time to respond with competitive bids. Otherwise, the contractor community can find it challenging to respond to all bid requests.</p>	<p>Work with other agencies seeking construction bids to ensure a steady flow of advertisements. Announce advertisement schedule in advance and publish widely. (See recommendations of Procurement Task Force)</p> <p>Distribute the work in several ways, including geographically, modally, programmatically, and by contract type.</p> <p>Accelerate existing construction projects or advance projects that do not interfere with use of the facility (i.e. do not require lengthy lane closures or service interruptions).</p>
<p><b>Seasonal Issues</b></p> <p>Many projects are advertised to coincide with the construction season, which excludes the winter months. In most cases, for a project to be under construction in 2009, it should be advertised for construction in February or March 2009.</p>	<p>For any new projects that are added to the list, prioritize preparation of bid packages to the extent feasible to complete seasonal work prior to the end of the 2009 construction season.</p>
<p><b>Supplies</b></p> <p>In certain types of construction, the supply of materials is limited. For example, the number of suppliers of asphalt for road paving is small, which means that there may be constraints on the supplies if too many road projects are underway simultaneously. This could lead to price escalation.</p>	<p>Work with industry officials to strategize on ways to manage procurement of materials to manage supply and demand.</p>
<p><b>Lag Time</b></p> <p>Construction requiring the manufacture of steel must build in sufficient lead time to place orders for steel and await its fabrication and delivery. This is true for other manufactured materials. Price escalation is also a concern.</p>	<p>Place orders as soon as possible and defer other orders to meet industry capacity.</p>
<p><b>Bonding</b></p> <p>The tightening of credit has impacted the surety business. Contractors are facing tougher scrutiny when they are seeking the required bonding in order to bid on large construction projects. This can create a</p>	<p>See recommendations of Procurement Task Force.</p>

Barrier / Obstacle	Mitigation Strategy / Actions Required
barrier for the formation of new construction companies.	
<p><b>Limited Number of Qualified Construction Companies</b></p> <p>Out-of-state construction companies have been responding to bids in Massachusetts because there is less work in their home states. Because the Federal Act will result in construction projects throughout the nation, these firms might not bid on Massachusetts construction jobs. In addition, the pre-qualification requirements limit the number of firms able to bid on projects. Nevertheless, representatives of the construction industry have indicated that they will have sufficient capacity to respond to additional project advertisements.</p>	<p>Similar to other task forces, work with industry associations and agencies to proactively notify contractors of the opportunity for work and to assist them in getting certified/prequalified. Public agencies should also identify opportunities to streamline the certification/prequalification process. Consider implementing the Condensed Prequalification Process proposed by the Procurement Task Force.</p>
<p><b>Permits</b></p> <p>Permitting requirements should not be overlooked. Several agencies described the challenges of obtaining permits from local conservation commissions for projects within existing rights-of-way.</p>	<p>The Permitting Task Force recommended a number of solutions to address this barrier. However, EOT reiterates that interagency cooperation will be needed to ensure quick implementation of projects.</p>
<p><b>MassHighway Staffing</b></p> <p>MassHighway is already undertaking a dramatically larger road and bridge program than they have done in the past. This impacts both pre-construction activities and construction. On the design side, with the Accelerated Bridge Program (ABP) underway MassHighway is positioned to deliver this aggressive program throughout 2009. In order to implement ABP, employees transferred out from other MassHighway sections, leaving vacancies that remain unfilled. Positions will need to be filled and additional staff will be needed in order to advance additional design projects quickly</p>	<p>See discussion above. Some of the shortfall can be addressed by focusing on resurfacing projects, using on-call consultants, retirees, and temporary hires. Overall, a substantial effort will be needed to ensure that the staffing resources are available.</p> <p>For additional actions, see recommendations of the Work Force Task Force.</p>
<p><b>MassHighway Construction Documents</b></p> <p>Once a project is ready for advertisement, it is transferred to the construction contracts section of MassHighway. This group reviews final designs for constructability and puts together the packages that the contractors use to bid construction projects. Additional employees are needed to address current demands and more would be needed if activity levels increase considerably.</p>	<p>Hire additional staff for construction contract section.</p>
<p><b>MassHighway Procurement (Issuing Notice to Proceed)</b></p>	<p>See recommendations of Procurement Task Force.</p>



Barrier / Obstacle	Mitigation Strategy / Actions Required
<p>On the construction side, the department is currently undertaking an ambitious program due to ABP. Through effective reforms in the pre-construction process, projects are being advertised more quickly than in the past. Previously, it took an average of 104 days from bid opening to NTP and this has been reduced to an average of 59 days. Further, the recent economic downturn in private construction has increased the supply of trained workers. But consideration must be given to making sure that the flow of road and bridge construction does not end up creating competition among agencies such as MassHighway, the MBTA, DCR, or the MassPike, all of whom own roads and bridges</p>	
<p><b>MBTA and MTA Board Meetings</b></p> <p>The MBTA and MTA Boards meet monthly; which may not be frequently enough to advance time sensitive projects quickly, where spending within prescribed dates is required.</p>	<p>The approval process could be improved, specifically for projects under the economic stimulus initiative, by securing Board approval for the entire program with appropriate reporting requirements; preserving the Board's fiduciary responsibilities while eliminating the requirement for approval of individual projects within the program.</p>
<p><b>Department of Conservation and Recreation Resource Constraints</b></p> <p>DCR is an EOE agency. They have limited staffing to manage new projects beyond their current program and would rely on consultants to do their design work. They also face competition for consultants and contractors with other road and bridge agencies.</p>	<p>See narrative and recommendations in the State Facilities and Courts Task Force.</p> <p>For additional actions, see recommendations of the Procurement Task Force.</p>
<p><b>Federal Funding Eligibility Constraints</b></p> <p>The current U.S. House of Representatives stimulus proposal limits eligible projects to those that can be funded under existing Title 23 rules. This results in the exclusion of projects on most local roadways.</p>	<p>There would be substantial value in instituting a Community Transportation Infrastructure Assistance Program to supplement funding and support of the Chapter 90 Local Roads Program. The Commonwealth, along with its municipalities, should advocate during Congressional deliberations for the expansion of funding eligibility to include any transportation projects for which Massachusetts General Law allows state financial support.</p>

For information on Procurement, Permitting and Workforce, see *Section III, Cross-cutting Task Force Overview*.

## 8. Metrics for Measuring Success

There are a number of ways to measure the success of transportation-related projects and programs. Throughout the implementation of the Federal Act, it will remain critical to focus on its central



purpose, which is job creation and job retention. It will also be important to determine how effectively the projects and programs are supporting the Commonwealth's organizing principles and the policy directives of the new administration.

Ultimately, the key measure of success will be whether the job gets done. In other words, the projects identified on the list must be able to be implemented on schedule. The Transportation Project Delivery Task Force devoted considerable energy to determining project readiness. Mobility Compact members were asked to identify projects that could begin implementation at four initial intervals of 90 days, 180 days, one year, and two years. Projects can begin implementation soon after the execution of a contract whether for procurement, consultant services, or construction.

Because most if not all of the projects are likely to be funded through traditional transportation funding channels administered through USDOT agencies, readiness will be defined by the impending Federal Act. The House Appropriations Committee version of the bill identifies a number of measures related to the awarding of contracts and includes the forcible redistribution of unobligated funds. With these considerations in mind, the following are proposed metrics for measuring the success of the Federal Act for transportation projects.

## Metrics

For each of these metrics, it is suggested that a list be prepared showing all of the projects and a timeline, which summarizes the number of projects or procurements that achieve a particular milestone each week.

Metric	Description	Method for Monitoring / Measurement
<b>Design Contract Awards</b>	For pre-construction services or procurements, tracking of the number achieving various milestones in the contracting process	Prepare monthly reports on the number of projects that achieve: <ul style="list-style-type: none"> <li>• Completion of Project Scope and Estimate</li> <li>• Approval of Request for Response (RFR)</li> <li>• Advertisement of RFR or Procurement</li> <li>• Selection of Consultant or Vendor</li> <li>• Fee Negotiation and Contract Execution or Purchase</li> </ul>
<b>Construction Activities</b>	For construction services or procurements, tracking of the number achieving various milestones in the contracting process	Prepare monthly reports on the number of projects that achieve: <ul style="list-style-type: none"> <li>• Advertisement</li> <li>• Bid Documents Opening</li> <li>• Contract Awards</li> <li>• Issuance of Construction Notice to Proceed</li> </ul>
<b>Jobs</b>	Number of jobs created and duration for which they were created by each project funded.	<ul style="list-style-type: none"> <li>• Incorporate systems for measuring job activities through payroll reporting and other tracking</li> </ul>

		measures.
<b>Long-term benefits</b>	Consistency with Governor's organizing principles and <i>youMove Massachusetts</i> Themes	<ul style="list-style-type: none"> <li>• Report on quantity of and investments associated with projects addressing various themes and principles on a monthly basis</li> </ul>

### III. Cross-cutting Task Force Overview

#### Permitting Task Force

##### 1. Introduction

The Permitting Task Force is charged with developing a process to speed up state and local permitting processes for ready-to-go Federal Act projects identified in the work plans. The Task Force focuses its efforts on ways in which to expedite the permitting and review process while also maintaining the state's high standards of environmental protection and other land use objectives.

The Task Force utilized an existing forum – the Interagency Permitting Board – and supplemented the membership to include all potential stakeholders in the deliberations. Membership includes nearly all state stakeholders involved with permitting and review during the development process, including quasi-public partners such as the Massachusetts Bay Transportation Authority, Massachusetts Port Authority and MassDevelopment. Participating agencies and organizations are as follows:

- Executive Office of Housing and Economic Development
- Massachusetts Permit Regulatory Office
- Department of Housing and Community Development
- Massachusetts Office of Business Development
- Office of Consumer Affairs and Business Regulation
- Executive Office of Energy and Environmental Affairs
- Department of Environmental Protection
- Department of Fish and Game
- Executive Office of Transportation and Public Works
- Executive Office of Labor and Workforce Development
- Department of Labor
- Division of Capital Asset Management
- Department of Public Safety
- Joint Committee on Consumer Protection and Licensure
- Massachusetts Bay Transportation Authority
- Massachusetts Port Authority
- MassDevelopment
- Massachusetts Building Trades Council
- South Shore Building Trades Council
- Massachusetts Municipal Association
- City of Attleboro
- City of Lowell
- Town of Foxborough

The Permitting Task Force met six times between December 22, 2008 and January 26, 2009 to develop a strategy to speed the permitting and review of Federal Act projects. The results of these deliberations include agency-specific remedies and the establishment of a multi-agency framework to review and advance complicated projects involving multiple reviews by a variety of state, local and federal agencies.

Expedited permitting and related review is critical to the successful deployment of Federal Act funding. Through an expedited review process, the Patrick Administration will maximize the number of eligible projects for federal infrastructure dollars and therefore maximize the stimulus effect of that spending.

## 2. Members

Name	Title	Agency / Organization
Bialecki, Gregory (chair)	Undersecretary for Business Development	Executive Office of Housing and Economic Development
Anderson Lamoureux, April	Permit Ombudsman/Director	Massachusetts Permit Regulatory Office
Ayrassian, Gary	Planner	City of Attleboro
Baacke, Adam	Assistant City Manager	City of Lowell
Brennan, Andrew	Director of Environmental Affairs	Massachusetts Bay Transportation Authority
Buckley, Jack	Deputy Director	Division of Fish and Game
Caspbarra, William	Building Commissioner and Director of Code Enforcement	Town of Foxborough
Clarke, Sandra	Chief of Staff	Office of Consumer Affairs and Business Regulation
Dalzell, Stewart	Deputy Director, Environmental Planning & Permitting	Massachusetts Port Authority
Feher, Matthew	Senior Legislative Analyst	Massachusetts Municipal Association
Gaertner, Kurt	Planning Coordinator	Executive Office of Energy and Environmental Affairs
Gatzunis, Thomas	Commissioner	Department of Public Safety
Goodman, Nancy	Vice President for Policy	Environmental League of Massachusetts
Hunter, Michael	Director, Business Resource Team	Massachusetts Office of Business Development
Kimmell, Ken	General Counsel	Executive Office of Energy and Environmental Affairs
Lehan, Richard	General Counsel	Department of Fish and Game
Lucien, Lionel	Manager, Public-Private Development Unit	Executive Office of Transportation and Public Works
Marlin, Rich	Legislative Director	Massachusetts Building Trades Council

Name	Title	Agency / Organization
McGrail, Robert J.	Director of Special Projects	Executive Office of Labor and Workforce Development
McMahon, Martha	Deputy General Counsel	Division of Capital Asset Management
Meeker, Carol	Deputy General Counsel	Division of Capital Asset Management
Miller, Michael	Senior Vice President for Real Estate	MassDevelopment
Moran, Gary	Deputy Commissioner	Department of Environmental Protection
Murphy, Alana	Policy Director	Department of Housing and Community Development
Noel, George	Director	Department of Labor
Rizzi, Robert	President	Quincy & South Shore Building Trades Council
Rodrigues, Michael	Chairman	Joint Committee Consumer Protection and Licensure
Weinberg, Philip	Associate Commissioner	Department of Environmental Protection

*Individual members should not be construed to have endorsed the contents of this report.*

### 3. Permitting Task Force Objectives

Building on the Governor's charge for the Permitting Task Force and the guiding principles he articulated for the projects to be funded under the Federal Act, the Task Force agreed to use the following questions about the permitting process to guide the Task Force in its deliberations and in the development of its recommendations:

- How can state agencies expedite permitting and related reviews for priority projects in order to maximize the number of projects eligible for Federal Act funding? For this exercise, the Task Force assumed that six months would be available to complete all project reviews, issue permits and complete the procurement process. With this six-month period the Task Force assumed there is a 90 day window to complete the permitting process.
- What resources are necessary to complete 90-day reviews? Agencies were asked to evaluate the current capacity of their organization and additional resources that may be necessary to improve efficiencies and meet the anticipated demand created through a federal recovery bill. Agencies were also asked to consider innovative avenues for expediting reviews.
- How can all applicable agencies collaborate most effectively to address the needs of individual project proponents?

In response to the aforementioned questions, all agencies participating in the Permitting Task Force have committed to the following Statement of Commitment:

Participating agencies commit to the following principles for any state or federal infrastructure project identified as a priority project by the Patrick Administration during the CY 2009 – 2010:

- Projects will be given administrative priority;
- Projects will be assigned to dedicated project managers within each agency;
- Permitting decisions and relevant reviews on priority projects will be rendered within 90 days;
- Participating agencies will develop a procedure by which the 90-day reviews will be accomplished; and,
- All agencies will participate in the Task Force collaborative review process, as needed.

#### 4. Permitting Task Force Findings

The Permitting Task Force has found that the existing permitting processes generally work well, and serve to ensure the Commonwealth maintains the highest standards of environmental protection and other land use objectives. However, the Task Force recognizes the unique opportunity presented by the American Recovery and Reinvestment Act and has identified several aspects of the review process that should be considered, including:

- a. Projects not already in the permitting process should be assessed for potential permitting challenges by the Task Force prior to being considered for Federal monies.
- b. Permit appeals can create substantial delays for projects and should be settled in an expeditious fashion.
- c. The need to comply with federal permitting may reduce the number of projects eligible for federal stimulus.
- d. The lack of coordination among approving agencies may cause projects to be delayed.
- e. Projects requiring permits from multiple agencies may exist and will require special attention.

#### 5. Permitting Task Force Recommendations

**Recommendations.** Based on the objectives and findings above, the Permitting Task Force recommends the following general recommendations to the existing permitting processes in order to accelerate or otherwise improve those processes for projects funded under the Federal Act.

##### A. Placement on Priority Funding List

- The Permitting Task Force recommends that any project being considered for Federal Act funding that has not yet commenced or completed the State permitting process be subject to review by the agencies participating in the Permitting Task Force. The Task Force recognizes its role is to maximize the number of projects that can be ready for federal funding. That said, the Task Force recommends that a list of potential projects be vetted by the Permitting Task Force to “red flag” any projects that will have substantial permitting or regulatory challenges before they are prioritized for funding.
- The Task Force will conduct preliminary evaluations of projects that are not yet fully permitted and “red flag” projects with substantial permitting or regulatory challenges. This period of preliminary evaluation will be conducted in an expeditious fashion by all affected agencies.

##### B. Appeals

- Permit appeals can create a substantial delay for projects. The Permitting Task Force recommends several means by which to address this issue:

- Broad-based reform of the permit appeals process for designated Federal Act projects to enable project proponents to proceed at their own risk when an agency permit is issued and subsequently appealed. This recommendation mirrors the local appeals process that allowed by MGL c.40A s. 11 that allows proponents to proceed at their own risk when a previously issued special permit has been appealed;
- Chapter 205 of the Acts of 2006 established a separate session of the land court department, known as the permit session. This session has original jurisdiction, concurrent with the superior court department over certain civil actions involving land use and environmental permitting. Currently, cases filed in the permit session are limited to those involving either 25 or more dwelling units or the construction or alteration of 25,000 square feet or more of gross floor area or both. The Permitting Task Force recommends that all federal stimulus projects be referred to the Permit Session of Land Court, and that the Permit Session be granted additional staff resources to meet the increased demand.

### C. Federal Exemptions

- The Permitting Task Force recommends that the State pursue federal legislation that exempts federal stimulus projects from federal reviews that are triggered by federal funding sources. This exemption would be limited to those projects where the federal funding is the *only* federal action that triggers federal review. These reviews include National Environmental Policy Act (NEPA), Section 106 of the National Historic Preservation Act (see next bullet) or any of the review programs of the US Department of Transportation Act. This exemption would be limited to federal environmental review processes and would not exempt any project from the requirements of any federal permit (e.g., the US Clean Water Act, US Endangered Species Act, etc). Projects that would otherwise require a federal permit would still be subject to the federally required review processes.
- The Task Force recommends that federal funds are instead provided to states in the form of a “block grant” which then requires the state to conduct its own environmental review thereby avoiding any significant delays caused by federal agency reviews.
- The Task Force recognizes that transportation infrastructure funds are likely to be provided through sources governed by Title 23. As such, it will be necessary for transportation projects to be included in Metropolitan Planning Organization (MPO) Transportation Improvement Programs (TIPs) and the State Transportation Improvement Program (STIP). To maximize the projects eligible for federal funding the Task Force recommends:
- MPOs work closely with the EOT to institute an expedited process for TIP amendments, including both member and public review. The process should allow for TIP amendments to become effective immediately after bill passage and for the STIP to be amended immediately thereafter

### D. Massachusetts Historic Commission

- The Massachusetts Historic Commission (MHC) declined participation in the Permitting Task Force on the grounds that they are charged with carrying out federal regulation and federal reviews. However there will be federal stimulus projects that require MHC review and under traditional mechanisms, it can take several months for project proponents to consult with MHC and obtain their approval of plans to eliminate, minimize or mitigate the project's adverse effects on historic resources.
- If stimulus were to pass through federal agencies, under current law the project must be reviewed for compliance with Section 106 of the National Historic Preservation Act of 1966.
- All projects requiring state funding, licenses or permits must be reviewed for compliance with MHC in compliance with MGL c.9, s.26-27C. If federal stimulus projects are exempt from Section 106 of the National Historic Preservation Act and projects are instead subject to MGL c.9, the Task Force has drafted an amendment to this statute that it believes will help

facilitate an expedited and transparent review process through the Massachusetts Historical Commission.

- The Task Force acknowledges the importance of historic resources and has proposed the following solutions to expedite the MHC consultation process:
  - Statutory amendment to create a 90-day consultation period between the proponents and MHC that results in recommendations to eliminate, minimize or mitigate the project's adverse effects on historic resources. This 90-day process would be available only to proponents that request the assistance. For projects that have requested assistance after a determination of adverse effect, and if MHC does not respond and consult with the proponent to development recommendations within 90 days, the proponent would be able to proceed with the project. Current law applies this form of constructive approval to the 30-day period for initial determination by MHC.
  - The Task Force recommends the ability to contract with outside consultants is made available to the MHC to facilitate the expedited review process. A list of pre-qualified consultants can be accessed through DCAM as described below.
  - DCAM has contracted with 10 firms to assist with their compliance with federal and state historic laws and regulations. Other Commonwealth agencies including the Massachusetts Historic Commission may use these consultants provided prior written approval is received from DCAM's contract administrator. The consultant will bill the agency it performs services for and user agencies will be responsible for making payments directly to the consultant. A list of approved consultants is available on the Commonwealth's Procurement website <http://www.comm-pass.com>.
  - The Task Force respectfully requests the Secretary of State's approval for MHC to participate in the Permitting Task Force and collaborate with other state and federal agencies on the review of federal stimulus projects.

## E. Permitting Task Force

- The Permitting Task Force will be used as a place where project proponents can vet perceived permitting problems and obtain assistance, and where state agencies can collaborate on projects requiring review of multiple agencies. When proponents perceive a potential permitting delay, they may contact the Massachusetts Permit Regulatory Office (MPRO) and complete a Permitting Task Force Project Template. MPRO will analyze the issue, assign an MPRO project manager to the case, and take one of three actions:
  1. When the issue involves a single agency, MPRO will refer the case to the relevant agency for review;
  2. When the issue involves multiple issuing authorities, MPRO will convene the Permitting Task Force and invite the relevant state agencies and municipal officials to meet with the project proponent and attempt to coordinate the state and local review and permitting process;
  3. In the event that the State Permit Ombudsman determines there is no cause for action, the MPRO will notify the project proponent of such finding.
- The Permitting Task Force will also be a resource for state agencies that are having difficulty receiving timely information or responses from proponents of federal stimulus projects. In this case, the state agency may contact MPRO who will facilitate a meeting with the project proponent, municipality and any affected agencies.

**Potential Barriers.** As with any expedited process, there are potential barriers which will need to be overcome. Below are the barriers identified by each agency and a proposed solution to mitigate those barriers.

### A. Executive Office of Housing and Economic Development

#### Massachusetts Permit Regulatory Office (MPRO) – Potential Barriers to 90 Day Reviews

- Timing and coordination of multiple agencies reviews for individual federal stimulus project.



- Timing and coordination of single agency reviews for individual federal stimulus project.
- Additional project managers will be required.

#### Recommended Solutions

- The Permitting Task Force will convene weekly for the duration of the deployment of Operation Recovery funds to collaborate and discuss multi-agency reviews of individual projects.
- For individual projects that require multiple agency reviews and are concerned about permitting process or regulatory complications or delays, the Task Force will be available to meet with the project proponent and attempt to remedy their concerns.
- For individual projects that require single agency reviews and are concerned about permitting process or regulatory complications, the Task Force will work with the proponent and agency responsible for the review to seek a solution.
- MPRO will serve as the single state point of contact for permitting issues and will convene the Task Force as appropriate. An MPRO project manager will be assigned to each incoming project.
- MPRO proposes hiring two additional Project Managers on a contract basis for CY2009 – CY2010.

### **B. Executive Office of Energy and Environmental Affairs**

#### **Department of Environmental Protection – Potential Barriers to 90 Day Reviews**

- Additional permitting staff is essential in order to ensure timely permitting and to provide technical assistance for stimulus projects, while continuing efficient and timely permitting of existing projects that support economic development;
- There are also a number of permit categories for which 90-day permitting may be infeasible. These categories include permits where:
  - Collection of required field and technical data takes a sufficient portion of or is greater than 90 days (e.g., groundwater discharge and major new water supply permits)
  - Mandated public notice process requirements and/or historic pattern of public involvement takes a sufficient portion of or is greater than 90 days (i.e., Chapter 91, wetlands protection act variance; and
  - Other agencies control permitting timelines (e.g., wetlands reviews commenced at local Conservation Commissions, federal permits such as NPDES discharge permits or Army Corps 404 permits for fill or dredge).
- Completeness of the proponent's application and responsiveness to information requests; A proponent's failure to adequately respond within ten business days to a notice that their application is deficient will result in an extension of the permit deadline equal to the number of days an adequate response is delayed.
- Appeals of permitting decisions.

#### Recommended Solutions

- Temporary staff/resources to ensure timely permitting and technical assistance for stimulus projects. MassDEP estimates 4-7 staff needed per 100 permits (based on an average of 2 permits per project, 8-14 staff would be needed for permitting of each 100 projects requiring MassDEP permits).
- Emergency legislation authorizing state permitting agencies and municipal authorities to promulgate emergency regulations that would exempt/waive federal stimulus projects from current statutory or regulatory requirements to obtain an individual preconstruction permits or

otherwise streamline the permit process by revising existing permit procedures or standards; provided that agency makes a finding that the exemption/waiver or streamlined approval will be conditioned in order to prevent significant damage to the environment. The regulations adopted under this provision would sunset within 6-12 months from promulgation.

- Establish resource protection conditions and best management operating practices in “permits by rule” that would prevent adverse impact to the environment for federal stimulus projects. Compliance with those pre-conditions would be required to obtain an exemption from individual permit application submission and review. The regulation would require plans to be prepared by a registered professional engineer or similarly licensed professional who would submit a certification that the project was completed in accordance with the permit by rule conditions. Certifications would be subject to compliance audits. Examples of activities to be considered for conditional exemption from individual permit process may include the following:
  - Reconstruction Projects: The transportation bond bill exempts state highway projects from compliance with MEPA, c. 91 (Waterways) and Wetlands permitting where the project is a reconstruction or rehabilitation project within the same alignment. This exemption could be expanded to municipal road and bridge projects or other reconstruction projects that will occupy the same footprint, subject to best management rules to ensure that surrounding resources areas are not impacted during the reconstruction process. The concept could be expanded to include expansions of appropriate scale in relation to resource area protection required.
  - Dredge and Fill Projects: The current Water Quality Certification regulations (“401 Certification”) do not require a DEP permit for the dredging or disposal of 100 cy of fill where a federal Category 1 Programmatic General Permit (PGP) is applicable. These exemption criteria could be expanded to allow for greater volumes of dredging or filling with resource protection performance standards and best management practices established that ensure the work would not impact the aquatic environment or riverbanks.
  - Projects in Wetland Resource Areas: The state wetland regulations currently establish a 100 foot buffer zone around Bordering Vegetated Wetlands (BVW) and a 200’ buffer zone around Riverfront Areas. Work in the resource area and buffer zone requires local Conservation Commission approval with potential appeals to DEP. In addition, there is a list of limited projects that are not required to meet specific performance standards, but are still required to proceed through the full approval process. At “Greenfield” developments in buffer zones, permit by rule conditions regarding project scaling, activity setbacks, and storm water, erosion and sediment controls work would prevent impacts to resource areas. At “Brownfield” developments in urban waterfronts, expanding the exemptions for redevelopment projects and economic alternative analysis will reduce permit timelines. The limited projects lists could also be expanded to expedite reviews subject to implementation of resource protection performance standards and associated best management practices.
- MassDEP will explore potential statutory reforms to enable further streamlining for federal stimulus projects. Such measures may include reduced public comment periods and the ability of project proponents to proceed at their own risk in the face of an appeal. Under the current wetland protection review process, construction cannot proceed—even if MassDEP has issued a permit—if that approval is under appeal. This can sometimes be a major cause of delay. MassDEP will conclude its statutory review within 30 days of the issuance of this report and make recommendations shortly thereafter.

### **C. Department of Fish and Game – Potential Barriers to 90 Day Reviews**

- As a general matter, a project proponent’s failure to timely submit a complete application and or to timely respond to any follow-up information requests are barriers to 90-day reviews. For example, delays may result if a project proponent does not submit a final conservation plan reflecting agency recommended modifications in a timely fashion;

- Potential delays may occur if projects require a take permit and the project has not yet commenced with the DFW/NHESP process. The period for reviews is set forth in Department regulations as follows:
  - 321 CMR 10.18 of the Massachusetts Endangered Species Act (MESA) regulations requires that any project or activity that will take place in DFW-delineated priority habitat for a state-listed species must be reviewed by the Natural Heritage Endangered Species Program (NHESP) prior to the commencement of work in the priority habitat. The NHESP has 30 days to determine whether an application for review is complete, and 60 days to complete its review.
  - If the NHESP's review determines that a take will occur, the project or activity must either be modified to eliminate the take or the proponent must obtain a conservation and management permit from the NHESP pursuant to 310 CMR 10.23. The NHESP has 30 days to approve or deny the proponent's proposed final conservation plan,
- The MESA regulations at 321 CMR 10.14 contain 12 categories of projects and activities that are exempt from the above MESA review and permitting requirements in 321 CMR 10.18 through 10.23. These include exemptions associated with certain maintenance, repair, or replacement work on existing commercial and industrial buildings and mixed use structures, and road or utility work. DFW has also promulgated guidance that allows certain project proponents to be exempt from MESA review if they took significant action towards implementing their project even though the site was later designated as priority habitat by the NHESP.
- The most recent DFW mapping of priority habitat in October, 2008 resulted in a 15% reduction in the total area of non-aquatic/non-wetland/non-protected open space designated as priority habitat in MA.

#### Recommended Solutions

- Prior to being added to a list of priority projects for federal stimulus funding, DFW/NHESP has the opportunity to map the project and determine whether or not the project will take place in DFW-delineated priority habitat for a state-listed species and if so, whether or not the review process has commenced. Assuming DFW/NHESP is provided sufficiently specific project location information it will conduct expeditious project evaluations after receiving the completed project template for each project;
- In order to conduct faster reviews of federal stimulus projects, DFW/NHESP will:
  - Consideration of MESA regulatory exemptions for one or more categories of federal stimulus projects. This review will include an evaluation of the existing exemptions under the MESA regulations as well as the NHESP's recent project review and permitting experience. DFW/NHESP expects to conduct this regulatory review within 30 days of the issuance of this report.
  - Establish a permitting team that will seek to complete its review and permitting of Federal Act projects faster than the existing regulatory deadlines (assuming staffing needs are met). The team will be modeled on the December 2008 MOU between MHD and DFW that provides funding for staff to meet accelerated MESA review and permit deadlines for MHD projects. The team will use dedicated NHESP staff to provide outreach to the project proponents and help guide them through the MESA process.
  - Development of best management practices ("BMPs") for certain state-listed species listed below and a related storm water protection plan ("SWPP"). DFW/NHESP has already committed, in connection with its December, 2008 MOU with MHD, to develop these MOUs, and expects them to be well underway in the next 3 months. DFW/NHESP already has permitting guidelines for the eastern box turtle. Regardless, assuming its staffing needs are met (see below), DFW/NHESP is committed to meeting accelerated timeframes for permitting Federal Act projects even if the new BMPs identified below are not fully in place.

- More specifically, BMPs will be developed for the following state-listed species that frequently require project conditioning:
  - Freshwater mussels;
  - Marsh birds (e.g., bittern, rail, grebe);
  - Freshwater turtles (Blanding’s and wood turtles).
- Development of a BMP or a Frequently Asked Questions (“FAQ”) document for the bald eagle, the atlantic sturgeon, shortnose sturgeon, and other state-listed fish species.
- Exploration of ways to facilitate an expedited path to off-site mitigation, including the concept of an expanded conservation bank for such MESA-related projects. In that regard, DFG and DFW signed an MOA with the Nature Conservancy (“TNC”) in July 2008 that utilizes the TNC as a resource for MESA permit applicants to provide enhanced off-site mitigation.
- DFW requires additional staff to support the aforementioned streamlining plan:
- In FY 2009 a total of 14 NHESP staff completed 1,016 reviews of projects under MESA. This averages out to one staff person handling 79 projects over the course of a year. Consequently, the estimated number of new staff needed to handle the Federal Act projects would be 1 for every additional 79 projects.
- For example, a 10% increase in the number of projects reviewed under MESA (over the FY 2009 total) would require an increase of 2 NHESP staff.
- NHESP is also requesting 2 staff to be dedicated to providing technical assistance and outreach to the project proponents and to guide Federal Act project proponents through the MESA process.

#### **D. Executive Office of Transportation and Public Works**

##### **Massachusetts Highway Department – Potential Barriers to 90-Day Reviews**

- Timely review of MassHighway submissions is dependent on complete submissions and timely responses to MassHighway comments at various stages of design and review.
- Staff resources are required to expedite MassHighway reviews.

##### Recommended Solutions

- 14 employees are required to review every \$100 million in total project costs. The personnel are required to address the design, review, permitting, and construction oversight of private development projects that could benefit for funding through the stimulus package. These projects would consist of private developments that have completed MEPA and need design review by MassHighway to secure their permit, and subsequently construct these improvements.
- Additionally, MassHighway will consider utilizing outside consultants as peer reviewers if necessary to enable 90-day reviews.

#### **E. Executive Office of Public Safety**

##### **Department of Public Safety – Potential Barriers to 90-Day Reviews**

- Building Code revisions effective March 1, 2009 may affect the timely issuance of building permits for projects that were designed under the Sixth Edition of the Building Code.

##### Recommended Solutions

- There are two ways in which the Department of Public Safety can remedy potential delays caused by new Building Code Revisions:
  - First, a project applicant may apply for variances from the Building Code Appeals Board (BCAB) for building features that are not in compliance with the Seventh Edition of the Code. The BCAB is a three-member subset of the full Board of Building Regulations and Standards.

The BCAB meets at least twice each month to consider variance requests. However, it may take 30-60 days in order to receive a hearing before the BCAB, probably more if there is an increase in applications due to stimulus dollar projects. Consequently, this may not be the most effective solution.

- Second, and possibly the more viable solution, members of the Board of Building Regulations and Standards may consider an extension of the concurrency period so that permit applicants may continue to design and build to the more familiar Sixth Edition of the Code. Board members meet the second Tuesday of each month. The next scheduled meeting will convene on February 10, 2009. Typically, Board members would consider and debate a request for an extension to the concurrency period during a regular meeting. Recognizing that swifter action may be necessary, Board members may be able to consider and vote the matter via a conference call or e-mail correspondence. There are trade offs however with this second solution, as an example the 7th edition has higher standards for some life safety and energy efficiency requirements.

### **Federal and State Accessibility Standards Differ—Proposed Solution**

- Legislation has been drafted and previously filed to regulate areas not generally open to the public, including employee-only areas, consistent with the Americans with Disabilities Act (ADA). The legislation clarifies the Board's jurisdiction as including not only public buildings but also facilities, and brings parking space requirements into conformity with the (ADA).
- The proposed legislation seeks to extend the Architectural Access Board's current jurisdiction over "public buildings" to include employee areas and bring the Board's enabling legislation into compliance with the ADA as well as modify the make-up of the Board.
- The Board's jurisdiction must be expanded in order to submit its regulations to the United States Department of Justice (DOJ) for certification as substantially equivalent to Title III of the ADA. The AAB promulgates rules and regulations designed to make public buildings accessible to and safe for individuals with disabilities, whether they are employed in or visiting the building. Title III of the ADA, which covers public accommodations and commercial facilities, recognizes the role that regulations like these play in ensuring compliance with building-related aspects of accessibility. As a result, certification by the DOJ indicates that local regulations meet or exceed the ADA's accessibility requirements for new construction or alterations.
- In recognition of the jurisdictional triggers of 521 CMR, and in an effort to insure that Federal Act monies are able to be expended for immediate and proper use, the Department, on behalf of the AAB, recommends granting a blanket time variance for compliance with the Board's regulations. It is understood that requiring immediate compliance would potentially cause unintended, negative consequences of preventing timely commencement of construction projects and hamper the success of the Federal Act package. This variance would apply to all projects that are funded with Federal Act monies. This arrangement has been discussed and agreed upon in general terms with representatives from DCAM and EOCD. To those ends, it is recommended that the AAB pursue an MOU commemorating this agreement with A&F.

### **F. Executive Office of Administration and Finance**

#### **Division of Capital Asset Management – Potential Barriers to 90-Day Reviews**

- Additional staff or the use of consultants may be required.
- If any particular project does involve the transfer or disposition of state lands, and legislation authorizing such transfer or disposition has not been enacted, special legislation will probably be required for that transfer or disposition.

### Recommended Solutions

- DCAM notes that if any of the priority projects involve the acquisition of real estate interests by the state, DCAM will need to hire outside counsel (subject to MGL Ch. 30, s. 65), environmental and other consultants;
- Project proponents requiring legislative approval seek assistance from DCAM's single point of contact, Martha McMahon and utilize the legislative text provided by DCAM.

### **G. Massachusetts Bay Transportation Authority**

- Timely review (i.e., within 90 days) is dependent on the proponents submitting full and complete applications to the MBTA.
- For most foreseeable projects, a license can be issued within the 90-day timeframe. A project that requires an easement or a direct interest in real estate must go through the MBTA review process and then by statute, must be presented to the MBTA Board of Directors for its approval. This additional step may take closer to 120 to 150 days to complete.
- MBTA must perform engineering review for all projects.

### Recommended solutions

- Prospective proponents should identify as soon as possible any MBTA license that may be required. Proponents should go to the MBTA's Real Estate website ([www.transitrealty.com/licensing](http://www.transitrealty.com/licensing)) for a copy of the license application and guidelines for processing an application. Proponents should be prepared to provide engineering drawings, survey plans, proof of insurance, etc. This information and the contact information for the MBTA staff appointed to these projects is included on the MBTA website under the guidelines for how to apply for a license or easement.
- For those projects that require an easement or a land transfer that require a Board of Directors approval, the MBTA can grant a license to allow the work to go forward pending Board Approval of the permanent easement. While the MBTA can make this accommodation, it is important to point out that many developers may not be able willing to move forward with a temporary license. This is particularly true for financing entities who will only be satisfied with the full and permanent easement. The MBTA will make all efforts to move these projects as quickly as possible.
- The MBTA anticipates that additional engineering assistance may be required on a short term basis.

### **H. Municipalities**

#### **Municipal Permitting: Potential Barriers to 90-Day Reviews**

- Every city and town manages their own local permitting process. Municipal processes may occur before, during or after the state process and there is no uniformity across communities. This may cause local permitting delays even after expedited reviews at the state level due to a lack of staff capacity, volunteer boards and commissions, or state revisions that impact local development.

### Recommended Solutions

- The Permitting Task Force recommends that all Federal Act projects be assigned a single point of contact on the local level to easily and effectively communicate with state agencies on that project;
- Proponents of Federal Act projects consult with the municipality before pursuing state permits in order to ensure the highest level of coordination;

- Municipal officials and the designated municipal point of contact are encouraged to attend any Task Force meetings involving projects in that community;
- State and local permitting agencies coordinate to the highest degree possible to ensure timely and coordinated decisions on Federal Act projects;
- Technical assistance to municipalities with a lack of capacity to conduct timely reviews would prove helpful to expedite matters on the local level. The Task Force recommends that technical assistance be delivered through existing quasi-public agencies that currently offer municipal technical assistance such as MassDevelopment and the Regional Planning Agencies. The Task Force recommends that funding be allocated for additional staffing in each quasi-public agency assisting with increased requests for technical assistance, as needed;
- For regional infrastructure projects involving two or more communities, the Task Force recommends that the communities work together to conduct joint municipal reviews.

## 6. Actions Needed

In order to enable 90-day reviews of Federal Act project, each participating agency will undertake the action plans described below. In order to meet the increased demand from the Federal Act projects, participating agencies will require supplemental staff. Each agency's staffing needs are described in the sections below and summarized in the following table:

Agency/Office/ Department	Type of Internal Staff Needed	Method Used to Estimate # of Staff Needed	Notes
<b>Massachusetts Permit Regulatory Office</b>	Project Manager	Estimate based on current workload with 1 director and 3.5 project managers.	Hiring to be on contract basis for CY2009—CY2010.
<b>MassHighway</b>	Project Management, Environmental Services, Right of Way, and Construction Support Staff	14 staff per \$100 million in total project costs.	<i>See Transportation Section for full staffing analysis.</i>
<b>Department of Environmental Protection</b>	Environmental Analysts, Environmental Engineers, and Regional Planners	8-14 staff per 100 projects. Based on estimate of 2 permits per project and 4-7 staff required for every 100 permits.	Hire consultants to provide permit review and legal/technical assistance and contractors to provide administrative support. Apply resources towards overtime for experienced permitters.
<b>Department of Fish and Game</b>	Conservation Biologist III	1 staff per 79 projects plus 2 additional staff for technical assistance. Based on FY2009 review of 1,016 projects by 14 NHESP staff.	2 additional staff would be dedicated to technical assistance and outreach for projects going through the MESA process.

Agency/Office/ Department	Type of Internal Staff Needed	Method Used to Estimate # of Staff Needed	Notes
<b>Department of Public Safety</b>	Building Inspectors, Engineering Inspectors, Elevator Inspectors, Administrative Support	1 building inspector per \$100 million and 1 support staff per \$500 million. 1 engineering inspector per 200 new boilers and 1 elevator inspector per 650 new elevators are also needed.	Additional support staff may be needed based on number of new boilers and elevators installed.
<b>Division of Capital Asset Management</b>	No additional internal staff requested. Outside Counsel and/or environmental consultants may be needed.	Anticipates using current staffing but based on volume of projects may need to hire additional staff.	If projects involve acquisition of real estate, DCAM will need to hire outside counsel, environmental or other consultants on a case by case basis. See State Facilities Section for full staffing analysis.
<b>Massachusetts Bay Transportation Authority</b>	Engineering		The MBTA will need temporary engineering assistance to supplement existing staff. See <i>Transportation Section for full staffing analysis.</i>

**A. Executive Office of Housing and Economic Development Massachusetts Permit Regulatory Office (MPRO)**

- Information on the Task Force and its ability to assist Federal Act project proponents with permitting will be added to the EOHED and MPRO websites.
- Templates with all necessary information have been prepared and will be completed by project proponents.
- Permitting Task Force will begin meeting with project proponents on February 2, 2009.

Staffing Plan

- MPRO consists of one Director and 3.5 project managers. In order to handle the increased workload of Federal Act projects, MPRO will add two project managers on a contract basis for CY2009 – CY2010.

**B. Executive Office of Transportation and Public Works MassHighway**

- Streamlining Underway: In October 2007 MHD implemented 720 CMR 13.00: Approval of Access to State Highways regulation to govern, among other things, expedite the overall environmental review and permitting process by providing project proponents with transparency, predictability, and timeliness of MassHighway actions on access permits;



- The MassHighway streamlining plan will be accomplished by utilizing:
  - Existing MassHighway procedures that call for “single points of contact” and dedicated project manager;
  - Current regulations allow permitting decisions and relevant reviews on projects to be rendered within a 90-day period subject to MassHighway receiving within all required submissions in a timely fashion;
  - Recent revisions to the Standard Operating Procedure (SOP) for the Review of Access Permits to be consistent with the regulations. The SOP assists project proponents and MassHighway in meeting the 90-day review, and if needed could be modify to meet the need of the Operation Recovery program.

#### Staffing Plan

- 14 employees are required to review every \$100 million in total project costs. The personnel are required to address the design, review, permitting, and construction oversight of private development projects that could benefit for funding through the stimulus package. These projects would consist of private developments that have completed MEPA and need design review by MassHighway to secure their permit, and subsequently construct these improvements.
- Additionally, MassHighway will consider utilizing outside consultants as peer reviewers if necessary to enable 90-day reviews.

#### **C. Executive Office of Energy and Environmental Affairs Department of Environmental Protection**

- Streamlining Underway: In 2007, MassDEP reduced its permitting timelines 20% across the board, and committed to issuing 90% of its permits within 180 days—and DEP is meeting these commitments.
- Existing FASTrack Program: Fast Track Permitting incorporates a set of sound environmental policies and procedures that promote smart growth and economic development across the Commonwealth. In the Fast Track program, MassDEP negotiates individual agreements with proponents of eligible projects, and guarantees:
  - Expedited administrative and technical reviews for all eligible projects;
  - Negotiated permit schedules and fees;
  - A single point of contact through the entire permitting process;
  - Protection of natural resources and promotion of smart growth; and
- The DEP streamlining plan will be accomplished through an enhanced FASTrack permitting program which encompasses the following features:
  - Pre-permitting meetings;
  - Ongoing technical assistance with applicants/consultants;
  - Dedicated “single points of contact” and project managers;
  - Senior management “ombudspersons” to resolve bottlenecks and coordinate multiple agency reviews.

#### Staffing Plan

- Reassignments of experienced permit staff;
- Temporary staff/resources to ensure timely permitting and technical assistance for stimulus projects. MassDEP estimates 4-7 staff needed per 100 permits (based on an average of 2 permits per project, 8-14 staff would needed for permitting of each 100 projects requiring MassDEP permits).

#### **D. Department of Fish and Game**

- Existing Exemptions and Guidance: The MESA regulations at 321 CMR 10.14 contain 12 categories of projects and activities that are exempt from the above MESA review and permitting requirements in 321 CMR 10.18 through 10.23. These include exemptions associated with certain maintenance, repair, or replacement work on existing commercial and industrial buildings and mixed use structures, and road or utility work. DFW has also promulgated guidance that allows certain project proponents to be exempt from MESA review if they took significant action towards implementing their project even though the site was later designated as priority habitat by the NHESP.
- Reduction in Priority Habitat Mapping Area: The most recent DFW mapping of priority habitat in October, 2008 resulted in a 15% reduction in the total area of non-aquatic/non-wetland/non-protected open space designated as priority habitat in the Commonwealth.
- The DFW/NHESP streamlining plan will include:
  - Consideration of MESA regulatory exemptions for one or more categories of Federal Act projects. This review will include an evaluation of the existing exemptions under the MESA regulations as well as the NHESP's recent project review and permitting experience.
  - Establish a permitting team that will seek to complete its review and permitting of Federal Act projects faster than the existing regulatory deadlines (assuming staffing needs are met). The team will be modeled on the December 2008 MOU between MHD and DFW that provides funding for staff to meet accelerated MESA review and permit deadlines for MHD projects. The team will use dedicated NHESP staff to provide outreach to the project proponents and help guide them through the MESA process.
  - Development of best management practices ("BMPs") for certain state-listed species listed below and a related storm water protection plan ("SWPP") in connection with DFW/NHESP's MOU with MHD. While having the BMPs and the SWPP in place will facilitate the expedited permitting of the Federal Act projects. DFW/NHESP, utilizing the requested additional staff, is committed to meeting accelerated permitting timeframes for the stimulus projects even if the BMPs are not fully in place.
  - More specifically, BMPs will be developed for the following state-listed species that frequently require project conditioning:
    - Freshwater mussels;
    - Marsh birds (e.g., bittern, rail, grebe);
    - Freshwater turtles (Blanding's and wood turtles).
  - Development of a BMP or a Frequently Asked Questions ("FAQ") document for the bald eagle, the atlantic sturgeon, shortnose sturgeon, and other state-listed fish species.
  - Exploration of ways to facilitate an expedited path to off-site mitigation, including the concept of an expanded conservation bank for such MESA-related projects. This approach will take advantage of the existing July, 2008 MOA between DFG, DFW and the Nature Conservancy ("TNC") that utilizes the TNC as a resource for MESA permit applicants to provide enhanced off-site mitigation.

#### Staffing Plan

- In FY 2009 a total of 14 NHESP staff completed 1,016 reviews of projects under MESA. This averages out to one staff person handling 79 projects over the course of a year. Consequently, the estimated number of new staff needed to handle the Federal Act projects would be 1 for every additional 79 projects. For example, a 10% increase in the number of projects reviewed under MESA (over the FY 2009 total) would require an increase of 2 NHESP staff.
- NHESP is also requesting 2 staff to be dedicated to providing technical assistance and outreach to the project proponents and to guide Federal Act project proponents through the MESA process.

#### **E. Executive Office of Public Safety Department of Public Safety**

- Additional Building, Engineering and Elevator Inspectors to meet anticipated demand;

##### Staffing Plan

- It is estimated that the Department of Public Safety would need to hire a minimum of one (1) additional building inspector for each \$200 million stimulus dollars spent on state building construction projects and retain at least one (1) support staff for each \$500 million spent. For instance, if a total of one billion is intended to be spent on varied state building projects, the Department would require at least 5 additional building inspectors and 2 support staff to handle added workload. This figure anticipates full staffing of its 14 FTE building inspector positions, for a total of 19 inspectors.
- It is estimated that the Department would need to hire a minimum of one (1) additional engineering inspector per 200 new boilers or pressure vessels added to existing stock which translates into approximately 1 new inspector for each \$4 million stimulus dollars spent on this type of activity. Additionally, it is estimated that the Department would require at least one (1) support staff for each \$400 million spent. For instance, if a total of \$400 million is intended to be spent on varied state engineering projects, the Department would require at least 10 additional engineering inspectors and 1 support staff to handle added workload. This figure anticipates full staffing of its 11 FTE engineering inspector positions, for a total of 21 inspectors.
- It is further estimated that the Department will need 1 additional Elevator inspector for each 650 new elevators constructed.

#### **F. Executive Office of Administration and Finance Division of Capital Asset Management**

- DCAM has designated two representatives, Deputy General Counsels Carol Meeker and Martha McMahon, to serve on the Task Force. They will communicate with others at DCAM as necessary, and will participate in ongoing Task Force review of projects.
- DCAM assumes its involvement in priority projects coming before this Task Force will relate to transactions involving the transfer or disposition of state lands. DCAM therefore proposes to meet the objectives of the Task Force by:
  - Identifying a single point of contact for project requiring legislative approval;
  - Identifying the transactions related to such projects as priority transactions;
  - Assigning experienced real estate property managers, attorneys, and others as necessary to address each priority transaction; and,
  - Using best efforts to complete each priority transaction within 90 days, subject to the requirements set forth in the legislation authorizing such transaction for appraisals, Inspector General review and approval of appraisals, surveys, Inspector General review and comment on documents, advance notices to the General Court and others, etc.
- DCAM does not anticipate the need for any general legislative amendments relating the transactions involved in the priority projects. If any particular project does involve the transfer or disposition of state lands, and legislation authorizing such transfer or disposition has not been enacted, special legislation will probably be required for that transfer or disposition. A sample bill is available by request.

##### Staffing Plan

- DCAM's current plan is to use existing staff to meet these objectives. Depending on the number and complexity of the transactions involved in the priority projects, however, additional staff, or the use of consultants, may be required.

- If any of the priority projects involve the acquisition of real estate interests by the state, DCAM will need to hire outside counsel (subject to MGL Ch. 30, s. 65), environmental and other consultants on a case-by-case basis.

#### **G. Massachusetts Bay Transportation Authority**

- The MBTA has identified a single point of contact for Federal Act project inquiries and those projects will be given priority in the license/easement review process;
- A project that requires an easement or a direct interest in real estate must go through the MBTA review process and then by statute, must be presented to the MBTA Board of Directors for its approval. This additional step may take closer to 120 to 150 days to complete. MBTA staff commits to taking all possible steps to shorten this timeframe as much as possible. Additionally, MBTA can grant a temporary license to perform the work while the Board of Directors' review and approval is pending.

#### Staffing Plan

- Temporary engineering assistance will be needed to supplement the MBTA's existing staff.

#### **Metrics for Measuring Success**

<b>Metric</b>	<b>Description</b>	<b>Method for Monitoring / Measurement</b>
<b>Improve Review Timeliness</b>	Timely Review of Federal Act Projects <ul style="list-style-type: none"> <li>• MPRO/Permitting Task Force will track the success rate of 90-day state agency reviews.</li> </ul>	<ul style="list-style-type: none"> <li>• Database of Federal Act projects detailing the date completed applications were received, date permits were issued by agency, and total permitting time by project.</li> </ul>

## Procurement Task Force

### 1. Introduction

***The Mission of the Procurement Task Force.*** The Procurement Task Force was established by the Governor in mid-December 2008 to evaluate existing procurement processes and to make recommendations for streamlining procurement in connection with any projects funded under the anticipated American Recovery and Reinvestment Act of 2009 (the Federal Act). Specifically, the Governor charged the Procurement Task Force with developing “ways to simplify and speed up the procurement and contracting processes consistent with transparency, accountability, and a fair opportunity for small businesses, including Minority, Woman and disadvantaged business enterprises (“M/W/DBEs”), to participate”. As a guiding principle, the Governor also charged Task Forces with giving preference if possible to Massachusetts companies and workers in awarding contracts for work funded under the Federal Act.

Under the Federal Act, there are expected to be “use it or lose it” provisions that require the commitment and expenditure of federal funds on eligible projects within specified time frames. These provisions are being included to ensure that the funding will be spent on projects that can commence quickly and create jobs in the near term. If a state does not spend funds for eligible projects quickly enough, the funds are expected to be reallocated to other states.

Procurement is a critical step in the path to starting work on a capital project. Consequently, the Governor rightly identified the time it takes to procure design and construction contracts and goods and services as one of the critical factors impacting our capacity to invest the federal funds in capital projects quickly enough to comply with the requirements under the Federal Act. We need to ensure that the procurement process does not cause any of our public agencies awarded funding under the Federal Act to fail to meet the related time requirements and to thereby lose the federal funding.

There are, however, necessary protections built into public procurement processes that make the public procurement of construction contracts and goods and services more time consuming than it would otherwise be. In connection with any procurement of construction contracts and goods or services by a public awarding authority, taxpayers have a legitimate interest in ensuring that their funds are being spent wisely. For this reason, laws governing the procurement of construction contracts and goods and services by public agencies generally require open and competitive bidding processes following public notice to ensure that the public is receiving the best value for its investment. Public procurement processes are also constructed to ensure that qualified contractors have a fair opportunity to bid on the provision of construction contracts and goods and services, including small businesses and minority and women-owned businesses; that public officials involved in awarding contracts are disinterested parties; and that other protections are in place to hold public officials accountable for the decisions that are made. While asking the Procurement Task Force to identify ways to simplify and speed up the procurement and contracting processes for projects funded under the Federal Act, the Governor also charged the Task Force with making recommendations that include these fundamental protections.

***The Process of the Procurement Task Force.*** Pursuant to the Governor’s direction, the Procurement Task Force was composed of a broad range of stakeholders in the public procurement process, including: representatives of a wide variety of public agencies that carry out capital projects, representatives of contractor and subcontractor associations, representatives of building trades organizations, representatives of the business community, representatives of the small and minority-owned business community, state legislators, the Inspector General, representatives of the Attorney General’s office, the Assistant Secretary for Access and Opportunity and representatives from the Office of Labor and Workforce Development. The individual members of the Procurement Task Force are listed in *Section 2* below. This broad representation contributed to productive, well-informed and

thoughtful deliberations at Task Force meetings at which all perspectives were articulated and considered.

The Procurement Task Force held six meetings of the full Task Force between December 22, 2008 and January 21, 2009. In addition, certain members of the Procurement Task Force were assigned to serve on smaller working groups, each of which met at least once to further develop recommendations presented at meetings of the full Procurement Task Force for further consideration at subsequent task force meetings. There were six working groups charged with developing recommendations in the following areas: the vertical procurement process; the horizontal procurement process; the information technology and equipment procurement process; labor-related procurement issues; M/W/DBE-related procurement issues; and the proposal to establish an economic stimulus alternate procurement board (discussed below).

At its first meeting, the Procurement Task Force developed objectives to guide its recommendations for the procurement process or processes that should apply to capital projects funded under the Federal Act. At the next two meetings, the Procurement Task Force evaluated the procurement processes currently followed by public agencies and decided on a general framework for recommending changes to these existing processes to achieve the Governor's and the Task Force's objectives with respect to procurement for projects funded under the Federal Act. At the final three meetings, the Procurement Task Force deliberated and decided upon the specific recommendations contained in this report.

***The Results of the Procurement Task Force's Work.*** The Procurement Task Force is proud to offer the recommendations contained in this report. In a short period of time, the Task Force reached consensus on a general framework for achieving the Governor's and the Task Force's objectives with respect to procurement for capital projects funded under the Federal Act. The Task Force is offering numerous recommendations that will streamline and improve existing procurement processes. These recommendations also preserve – and in some cases enhance – transparency, accountability and other important protections to ensure a fair, open and competitive process that yields the best value for taxpayers.

This report of the Procurement Task Force is a direct result of the remarkable contributions of each and every member of the Task Force. All Task Force members answered the Governor's call for action with enthusiasm and energy. They dedicated significant amounts of their time to the collective effort, and they worked hard to support it. Many Task Force members made compromises, putting aside their particular interests and concerns in furtherance of achieving the broader objectives of the Task Force. With a spirit of collaboration and mutual respect, the Task Force members worked together to develop the consensus recommendations contained in this report.

## 2. Members

Name	Title	Agency / Organization
Gonzalez, Jay (Chair)	Undersecretary	Executive Office of Administration & Finance
Adelman, Ed	Executive Director	State College Building Authority
Affanato, Steve	Associate Executive Director	Building Trades Employer Association
Beeman, Greg	President & CEO	Associated Builders and Contractors
Bickelman, Ellen	State Purchasing Agent	Operational Services Division
Bolling, Bruce	Executive Director	MA Alliance of Small Contractors

Name	Title	Agency / Organization
Boronski-Burack, Debra	President and CEO	Massachusetts Chamber of Business and Industry
Breen, Marie	General Counsel	MassPike
Callahan, Frank	President	MA Building Trades Council
Clifton, Kenrick	Asst. Director for Government Compliance	Massachusetts Bay Transportation Authority
Conyngham, Monica	General Counsel	EOTPW
Culver, Robert	President and CEO	MDFA
Dalton, Albert B.	Deputy Chief Legal Counsel	Massport
Dowd, Anne	EVP of Legislative Affairs	MDFA
Feeley, Kevin	Procurement	MWRA
Flanagan-Cahill, Susan	General Counsel	MSBA
Friedman, David	First Assistant Attorney General	Attorney General's Office
Goodman, Abbie	Executive Director and CEO	The Engineering Center
Griffin Munnings, Amy	Executive Director	New England Black Chamber of Commerce, Inc.
Hamel, Linda	General Counsel	ITD
Hedderman, Jenny	General Counsel	OSC
Jenkins, John		Massachusetts Black Business Alliance
Lawton, Monica	Executive Director	Associated Subcontractors of Massachusetts, Inc.
MacKenzie, Dave	Executive Director	UMASS Building Authority
Mahr, David	Capital Budget Director	EOEEA
Marlow, Ron	Assistant Secretary for Access and Opportunity	Executive Office of Administration & Finance
McDonough, Gerry	General Counsel	DOLWD
Nutting, Jeff	Town Administrator	MMA/Town of Franklin
Orsino, Jeannette	Executive Director	RTAs
Perini, David	Commissioner	DCAM
Petrucelli, Robert	Executive Director	Associated General Contractors of Massachusetts
Phillips, Ellen	Deputy Purchasing Agent	OSD
Pourbaix, John	Executive Director	Construction Industries of Massachusetts

Name	Title	Agency / Organization
Schectman, Amy	Associate Director for Public Housing and Rental Assistance	DHCD
Smith, William	General Counsel	MCCA
Sullivan, Greg	Inspector General	Commonwealth of Massachusetts

### 3. Procurement Task Force Objectives

Building on the Governor's charge for the Procurement Task Force and the guiding principles he articulated for the projects to be funded under the Federal Act, the Task Force agreed on the following objectives for the procurement process or processes to be used in connection with such projects. These objectives guided the Task Force in its deliberations and in the development of its recommendations:

- Speed
- Best value for the Commonwealth
- Quality goods and services
- Simplicity
- Transparency
- Accountability
- Fair opportunity for small businesses to participate, including M/W/DBEs
- Preference for MA businesses
- Fair competition
- Less costly procurement process
- Fair wages and benefits for workers

### 4. Procurement Task Force Findings

Under Massachusetts law, different procurement processes are required for the procurement of different types of design and construction contracts and goods and services. Specifically, there are different procurement requirements and processes authorized for vertical design and construction projects, horizontal construction projects, certain types of energy efficiency improvement contracts, the acquisition of goods and services by state entities, and the acquisition of goods and services by municipalities. Representatives from the Office of the Inspector General, Operational Services Division and Information Technology presented summaries of the different procurement requirements and processes for construction, goods and services and information technology services to the Procurement Task Force (included in *Appendix 4 – Procurement*). In addition, representatives from each of the public awarding authorities charged with carrying out capital construction projects for the Commonwealth provided the Task Force with an overview of specific procurement processes that apply to them.

Following an evaluation of the existing procurement processes, the Procurement Task Force identified the following findings which formed its recommendations with respect to the state and municipal procurement processes that may be used in connection with projects funded under the Federal Act:



- In general, the existing procurement processes work well and they further the objectives set forth above.
- Many reforms to procurement processes used for horizontal and vertical construction projects were implemented through the Construction Reform Law of 2004 (Chapter 193 of the Acts of 2004) as the result of the work of the Special Commission on Construction Reform, which was a legislatively established commission, and included many of the members of the Procurement Task Force.
- Both the public awarding authorities that administer and manage procurement processes and the private contractors that participate in such processes are familiar with and knowledgeable about existing procurement processes and the reforms implemented in 2004 through the Construction Reform Law.
- The establishment of new procurement processes that completely replace and change the way in which construction contracts and goods and services are procured for projects funded under the Federal Act would require time and resources to educate public and private participants about the process and would be more likely to lead to mistakes, delays and failed procurements.
- Depending on the project and the public awarding authority, it was reported that procurements can take anywhere from 14 to 120 days to complete under existing processes.
- While the time it takes to procure construction contracts and goods and services pursuant to the existing procurement processes will generally not prevent a project funded under the Federal Act from meeting the “use it or lose it” time requirements, it is possible that it could contribute to a failure to meet those requirements for some projects.
- While the existing procurement processes generally work well, there are a number of aspects of those processes that could be improved to result in a more efficient and expedited process, a simpler process and a process that otherwise does a better job of meeting the objectives set forth above.

Many recommendations of this Task Force will benefit Massachusetts companies and workers. Further consideration is being given as to whether procurement guidelines could be established to grant express preferences to in-state businesses consistent with legal requirements, and if so, whether the benefits of doing so would justify the potential costs and risks.

When the Procurement Task Force started its work, no draft of the Federal Act existed and it was not known whether the Federal Act would in any way address the issue of procurement of construction contracts and goods and services for projects funded under the Federal Act. Prior to publication of this report, a version of the Federal Act was filed in the House of Representatives which includes a requirement that all contracts awarded for projects funded under the Federal Act comply with the requirements of the Federal Acquisition Regulation (FAR). Based on an initial review of the FAR the Task Force has been advised that public awarding authorities in Massachusetts would be subject to State procurement laws in connection with projects funded under the Federal Act, but they would also need to comply with certain Federally mandated contractual requirements and policies. The Task Force would need to continue to monitor the development of procurement related provisions in the Federal Act as it moves through Congress and the impact, if any, such requirements will have for projects funded under the Federal Act.

The FAR shall apply to contracts awarded with funds made available through the Federal Act. The Task Force believes that Federal Act and the FAR authorize public awarding authorities to utilize state procurement statutes and regulations in the expenditure of such funds, so long as said public awarding authorities comply with federally mandated contractual requirements and policies, which the Task Force are still in the process of being identified.

## 5. Procurement Task Force Recommendations

Based on the objectives and findings above, the Procurement Task Force makes the following recommendations regarding the procurement and contracting of projects funded under the Federal Act.

**The General Framework.** The Procurement Task Force recommends that the existing procurement processes be used as the foundation for building simpler and faster processes for procuring and contracting projects funded under the Federal Act. In order to ensure that even the modified procurement processes do not unnecessarily pose a barrier to commencing a project within the time requirements in the Federal Act, the Task Force also recommends the creation of a special board with limited jurisdiction to grant waivers and/or modifications during the procurement process when appropriate.

**Generally Applicable Recommended Improvements.** The Procurement Task Force recommends the following generally applicable improvements to all relevant existing procurement processes where related existing provisions apply in order to simplify, accelerate or otherwise improve those processes for projects funded under the Federal Act.

### A. Recommend Establishment of an Economic Stimulus Alternate Procurement Board.

While the recommendations contained in this report are likely to minimize the instances in which the procurement process would prevent a public awarding authority from being able to start work on a project within the time requirements of the Federal Act, the Procurement Task Force recommends establishing a special process to address those instances when the modified procurement process is insufficient. Specifically, the Task Force recommends the establishment of an Economic Stimulus Alternate Procurement Board (“ESAP”) for the purpose of providing a means for waiving procurement requirements and instituting alternate requirements when necessary to ensure that a public awarding authority does not lose funding for a project under the Federal Act due to the procurement process. Specifically, the Procurement Task Force recommends the following with respect to the establishment of the ESAP Board:

- ESAP would be modeled after the Asset Management Board, a currently existing Massachusetts state government board authorized under M.G.L. c. 7B to consider exemptions from the public procurement requirements with respect to real estate and non-real estate transactions.
- Like the Asset Management Board, the ESAP Board would be authorized to waive the applicability of existing procurement and contracting rules and substitute others that must include safeguards to insure fairness, competitiveness, accountability and transparency. Unlike the Asset Management Board, however, the ESAP Board would only be authorized to grant such waivers if it is demonstrated that the waiver is necessary to ensure that a public awarding authority does not lose funding for a project under the Federal Act.
- Unlike the Asset Management Board, the ESAP Board would not be authorized to permit the use of fundamentally different, alternate procurement processes from those available to the awarding authority for the project under law; rather, it may waive and modify requirements of procurement processes authorized by law when and to the extent necessary to ensure that a project can be procured and commenced within the time requirements of the Federal Act.
- Proposals would be made to the ESAP Board by the Federal Economic Recovery Project Director at his/her discretion on behalf of the respective public awarding authority when it is determined that a waiver or modification from the procurement laws is necessary in order to procure and commence a project within the time requirements of the Federal Act.
- Proposals submitted to the ESAP Board by the Federal Economic Recovery Project Director would be subject to a 14-day public comment period. Following the 14-day public comment

period, the ESAP Board would, within 7 days, approve or reject the requested waiver or modification from procurement requirements or approve a modified version of the proposed action.

- ESAP Board authority would be exclusively limited to projects funded under the Federal Act and the ESAP Board would be dissolved when it is determined that there are no additional projects to be funded under the Federal Act by a public agency in the Commonwealth.
- ESAP Board decision making would be expeditious and final.
- ESAP Board membership should be comprised of individuals with requisite experience, a reputation of integrity and an absence of any actual or perceived potential conflict of interest, and members shall serve for the primary purpose of protecting the public interest in assuring fair, effective, and accountable procurement and contracting in connection with any project requiring a waiver or modification of procurement requirements.
- Project proposals would be written and state the need for ESAP Board consideration and the specific relief sought.
- Legislation would include standards and criteria that the ESAP Board would be required to follow in evaluating any requested waiver or modification to procurement requirements and it would include dollar thresholds for projects eligible for ESAP Board consideration.

**B. Where possible, develop Standard Economic Stimulus Contract Provisions across all contracting authorities for projects funded by Federal Act.**

- Agencies and authorities have each developed unique contract forms over the past few years that address specific statutory and administrative concerns of that entity. Some of the recommendations made by this Task Force may require that modifications to current contract forms be made. Provisions related to the Federal Act should be standardized to the extent possible so that contractors and vendors can easily discern changes to the contract forms they are otherwise familiar with.
- Where possible throughout the effort to standardize special stimulus provisions, the various agencies and authorities are encouraged to standardize other aspects of the contract specifications as practical.

**C. Apprenticeship is a career training program that combines paid on-the-job training with classroom instruction. Apprentice programs can be established by an individual employer, a group of employers, or a labor union. There are over 400 employers that have registered apprentice programs, and several thousand employers who have apprentices through collective bargaining agreements with labor unions. Apprenticeship training provides career development opportunities, and is one of the most cost-efficient workforce development tools, and the most affordable option available to both workers and employers.**

- Employers with registered apprentice programs are more likely to be Massachusetts employers. In order to have a registered apprentice program in the Commonwealth, an employer must have an office here, or, if an out-of-state contractor, its state must have a reciprocal agreement with Massachusetts.
- The purpose of the Federal Act is not just to create jobs, but to create jobs that will have a long-term benefit to the economy and to include all citizens, including the long-term unemployed and otherwise disadvantaged populations. Additionally, an apprentice training requirement is an essential program to meet these objectives. There are thousands of unemployed apprentices who are ready, willing, and able to work.
- Apprenticeship program requirements cannot interfere with the objectives of starting projects quickly and making projects available to a diverse job-seeking population.

- In recognition of these benefits, of apprentice training, and mindful of the concerns, a Labor Working Group from the Procurement Task Force, comprised of representatives from non-union and union contractors associations, the building trades union, and state and local governments that procure public works projects, reached the following consensus on an apprentice training requirement for public works projects under the Federal Act, where the amount of construction costs under any contract awarded is likely to exceed \$1 million:
- The specifications set forth in the Request for Responses shall require that, on a per project basis, no less than twenty percent (20%) of the total hours of employees receiving an hourly wage who are directly employed on the site of the project, employed by the contractor or any subcontractor, and subject to the prevailing wage, shall be performed by apprentices in a bona fide apprentice training program, as defined by M.G.L. c. 23, sections 11H & 11I that is approved by the Division of Apprentice Training of the Department of Labor & Workforce Development of the Commonwealth.
- The Procurement Task Force recognizes that this proposal may pose challenges for the filed sub-bid requirements of Section 44F of Chapter 149 of the General Laws, and that additional steps may be necessary to reconcile the proposal with those requirements.
- During the performance of the contract, the contractor shall submit periodic reports to the awarding authority with records indicating the total hours worked by all journeymen and apprentices in positions subject to the apprentice requirement. In any instance in which the apprentice hours do not constitute twenty percent of the total hours of employees subject to the apprentice requirement, the contractor shall submit a plan to the awarding authority describing how the contractor shall comply with the apprentice requirement.
- An awarding authority or a contractor may adjust these requirements if the Economic Stimulus Alternative Procurement Board determines that, despite a good faith effort, and due to unavoidable circumstances, such as a demonstrated lack of apprentices in a specific geographic area, compliance with these requirements is not feasible.
- Providing additional financial resources are available, the Division of Apprentice Training shall enhance its outreach efforts to underserved populations to increase and diversify the number of apprentices in the Commonwealth.

#### **D. Enhance contractor capacity and aid in the inclusion of M/W/DBE contractors.**

- Access to credit / working capital: enhance capitalization of quasi-governmental agencies, such as the Massachusetts Community Development Finance Corporation (CDFC), to provide greater access to capital on the part of M/W/DBEs.
- Contract Size: Given the timing of the Federal Act, there may be a desire to “bundle” contracts to create economies of scale that address efficiency concerns. However, “unbundling” contracts into smaller contractual elements is a sure way to encourage participation by small and M/W/DBE firms in a race and gender neutral manner. State agencies and the quasi-governmental corporations are encouraged to strike a balance between goals of efficiency and objectives of inclusion.
- On-Going Provision of Education and Training, Technical Assistance and Capacity Building Services—identify a funding source that can be brought forward and maintained in support of the provision of education and training, technical assistance, and capacity building services.
- Prompt Payment: since contractors tend to operate on very thin cash flows the Task Force recommends applying either the Operational Services Division prompt payment mechanism as used for paying vendors for the delivery of goods and services or federal prompt payment mechanisms to all contracts for projects funded under the Federal Act.
- Regional Contracting: public agencies, when pursuing projects across regions should seek to be as inclusive as possible of regional business entities, both small and M/W/DBE firms.

- **Contract Compliance:** Each state agency must be ready, willing and able to devote the requisite resources to ensure M/W/DBE and other contract compliance on public contracts.
- State agencies and authorities have M/WBE inclusion policies, DBE inclusion policies or both. Each state agency should apply its policy to the projects undertaken as part of the Federal Act.
- In doing so, each agency should ensure that it maintains adherence to the parameters that led to the adoption of their policy as well as federal court rulings regarding the application of race and gender conscious approaches regarding the use of M/WBE and/or DBE firms.
- All state agencies have “good faith effort” waiver language that allows for a lower utilization goal. Each public agency should adopt clear guidelines, which are applied uniformly, before issuing a waiver (see MBTA guidelines, *Appendix 4 – Procurement*).
- To ensure accuracy, transparency and accountability, contract compliance should be audited on a periodic basis. This audit function should include auditing the use of good faith waivers. This audit function should rest with both the state agencies and the Federal Economic Recovery Program Director.
- The Commonwealth should be allowed to adopt state M/WBE requirements when either (a) federal law and/or regulations are silent with respect to its own DBE requirements or (b) the state can demonstrate that the application of state M/WBE requirements will lead to greater access and opportunities for minority and women business enterprise participation.
- Where possible, race and gender neutral approaches to contracting, should be adopted to increase the level of participation of such firms.
- The Federal Economic Recovery Program Director should have responsibility for maintaining and reinforcing the principles and conceptual framework for access and opportunity. This framework should be embodied in proactive actions as well as in reporting and compliance functions.

***Generally Applicable Recommended Improvements to Construction Processes.*** The Procurement Task Force recommends the following generally applicable improvements to procurement processes for construction where related existing provisions apply in order to simplify, accelerate or otherwise improve those processes for projects funded under the Federal Act.

**A. Update threshold criteria in statutory and administrative policies as follows:**

- Allow design for maintenance/repair projects under a specified dollar threshold to proceed before funds are in place.
- Increase threshold for House Doctor Contracts to \$2.5 million aggregate fees for DCAM and as approved by the Designer Selection Board (DSB) and on a case by case basis for other public awarding authorities under the jurisdiction of the DSB. House Doctor Contracts typically involve multiple contracts to perform various engineering studies and design services up to a threshold for multiple agencies or facilities.

**B. Recognize that payment and performance bonding requirements provide certain financial protections to the Commonwealth but also may limit the number and diversity of bidders due to bonding capacity constraints and requirements. Payment bonds guarantee payment to subcontractors and laborers in the event the general contractor defaults. Performance bonds guarantee faithful performance of the contract by the vendor bonded (general contractor and/or subcontractors). These bonds are often issued together and typically are provided to the contracting authority prior to contract execution. Recommendations include:**

- Increase the thresholds of projects requiring payment bonds from \$2,000 and \$5,000 to \$25,000.
- Reinforce that there is discretion with respect to requiring 50% versus 100% payment bond on contracts less than \$100,000.
- Reinforce that there is discretion with respect to requiring a performance bond on contracts less than \$100,000.
- The state should capitalize a surety bond guarantee program and operate it through the Massachusetts Community Development Finance Corporation ("CDFC").
- Use the provision (recommended above) of on-going education and training, technical assistance and capacity building services to assist firms in their efforts to become bondable absent the bond guarantee program.

**C. Improve bid advertising information made available to the contracting community while reducing turnaround time. Specifically:**

- Eliminate existing advertising requirements in local newspapers; instead use direct email, websites and monthly ads in local papers directing persons to a centralized Federal website.
- All public awarding authorities should publish a list of projects on COMM-PASS or other centralized website so contractors can plan; use this centralized data base to coordinate bid opening dates on large projects.
- Reduce the required advertising time in the Central Register to one week and allow COMM-PASS and other on-line advertising to start the clock for the required advertising period when notice is provided.

**D. Decrease elapsed time from bid to "shovel in the ground" by enhancing processes that relate to the following contractor procurement processes:**

- Work with the Attorney General's Office to develop an accelerated bid protest process for projects funded under the Federal Act to ensure that bid disputes are filed and resolved promptly.
- Create performance-based specifications and standardized designs. This would allow for an easier bid process for less specialized items. Allow design for maintenance/repair projects under a specified dollar threshold to proceed before funds are in place.
- Enable the use of electronic signatures for internal approvals within state agencies and authorities.
- Every state agency and authority should outline the actual steps between bid advertising and issuing a "Notice To Proceed" and assess the process to determine if a more efficient internal process can be developed.
- Explore on-line bidding at state agencies and authorities where possible and not in conflict with public bid opening requirements.
- Where a public awarding authority is governed by a statutorily established board (i.e., MassPort, MSBA, MBTA, MTA, etc.) develop procedures to reduce or eliminate delays caused by the need to wait for board approval of contract award in instances where the board meets once a month. This may include scheduling special meetings for boards for the purpose of approving projects funded under the Federal Act or obtaining the EOT Secretary's signature on contracts at the time the board approves the contract.
- Mistakes in the procurement process, usually due to inexperience, can result in delays and protests. In order to mitigate these risks, create a program to further educate awarding authorities, contractors and subcontractors about procurement procedures. This would

provide education about any expedited procurement process implemented during the Economic Stimulus Program.

- Each agency should include standard provisions in contract for projects funded under the Federal Act that impose contract execution, NTP and commencement of work deadlines.

**Recommended Improvements to Specific Procurement Processes.** The Procurement Task Force Recommends the following additional improvements to the procurement processes for specific types of projects.

### **Vertical Construction**

- Revise advertising and bidding requirements for smaller projects.
  - For projects less than \$10,000, allow the use of sound business practices.
  - For project between \$10,000 and \$50,000 require three written quotes and award to lowest responsible bidder but relieve awarding authorities from public advertising requirements.
  - For projects between \$50,000 and \$100,000 require agencies to use sealed bid process under M.G.L.c.30,s. 39M procedures.
- Where only 1 or perhaps 2 sub-bids are received for a particular filed sub-bid trade and such sub-bids are significantly above the estimate, allow awarding authorities to reject the sub-bids and re-solicit bids once and if in the second round of bidding they still only receive 1 or 2 sub-bids and those bids are still significantly above the estimate, the awarding authority may assign the work to the general contractor, providing the awarding authority confirms that their estimate is accurate and the sub-bid prices are in fact unreasonably high.
- Increase designer selection law threshold from current thresholds applying to projects where the estimated construction cost is greater than \$100,000 or projects where the architect fee is greater than \$10,000 to projects where the estimated construction cost is greater than \$250,000 or the architect fee is greater than \$25,000.
- Update the Division of Capital Asset Management's (DCAM) current delegation authority:
  - Raise the current delegation threshold floor from \$100,000 to \$250,000.
  - Raise ceiling of delegation threshold from \$1 million to \$2 million.
- Streamline the designer selection process by eliminating the requirement for a formal study phase (and certification) and incorporating the programming function more efficiently into the continuum of the design process. This will allow for a more integrated study and programming and would expedite the transition into the design process (see *Appendix 4 – Procurement*).
- Streamline the designer selection process by having the Designer Selection Board (DSB) simultaneously approve selection of a design firm for study and final design. This will eliminate the time required for separate presentations to the DSB and approval by the DSB where the Agency is satisfied with the study designer (see *Appendix 4 – Procurement*).
- For Construction Manager (CM) at Risk projects (M.G.L. c. 149A) undertaken by DCAM—establish a procurement process which allows DCAM to prequalify construction manager firms and create an annual list of such prequalified construction manager firms in lieu of the current requirement to prequalify construction manager firms on a project by project basis. DCAM would then invite all prequalified construction manager firms to submit a proposal for specific projects from the list of prequalified construction manager firms. This would save time, costs and the administrative burden of conducting multiple simultaneous RFQs for individual projects and allow DCAM to expedite the initiation of CM at Risk projects (see *Appendix 4 – Procurement*).
- For CM at Risk projects (M.G.L. c. 149A) undertaken by other public awarding authorities, allow public awarding authorities (who have been approved to use the CM at Risk delivery method by the Office of Inspector General in accordance with the requirements of c. 149A) to

use DCAM's annual list of prequalified Construction Management firms in lieu of the current requirement to prequalify construction manager firms on a project by project basis. Such awarding authorities would then be allowed to invite all prequalified construction manager firms to submit a proposal for their specific project. This would save time, costs and the administrative burden of conducting multiple simultaneous RFQs for individual projects and allow public awarding authorities to expedite the initiation of CM at Risk projects (see *Appendix 4 – Procurement*).

- For projects procured under M.G.L. c. 149 with an estimated construction cost of \$10 million or more and subject to the mandatory prequalification of general contractors and subcontractors (M.G.L. c. 149, §§ 44 D $\frac{1}{2}$  and 44D $\frac{3}{4}$ ) recommendation is to streamline the mandatory prequalification process by providing an option to awarding authorities to utilize a “Condensed Prequalification Process” that allows certain of the statutory prequalification criteria to be evaluated by review of the DCAM Certification files, providing that the prequalification committee for such public awarding authority certify that such review has been undertaken (see *Appendix 4 – Procurement*).
- Allow for increased incentive payments to construction managers in special circumstances.
- For energy service projects authorized under M.G.L. c. 25A allow DCAM to establish an annual list of prequalified Energy Service Companies (ESCOs) from which public awarding authorities undertaking energy services projects may solicit a minimum of three (3) proposals for each project (see *Appendix 4 – Procurement*).

### **Horizontal Construction**

The Procurement Task Force is making a number of recommendations for which there was consensus among Task Force members. One recommendation received general collective support but concerns were raised regarding whether acceptable contractual language could be developed quickly enough to meet the time frames identified for action under the Federal Act.

### **Consensus Recommendations**

- Allow A+B Bidding for horizontal construction projects to enable agencies to take completion time into account in the selection process. Selection criteria and processes must be clear, objective and transparent; time requirements need to be imposed on awarding agencies to ensure timely decisions so as not to impede a contractor's work progress.
- Expand use of incentives/disincentives to achieve completion dates.
- Allow agencies and authorities that already receive federal funds to continue to follow those procurement practices already in place that save time.
- Use Task Order Contracts for both design and construction, on a Time and Materials basis, to begin construction in phases on small and medium sized horizontal construction projects.
- On appropriate projects, use “Rapid Award” process (similar to that used by MassPort in certain Homeland Security Contracts): prequalify bidders, require bidders to submit bonds at time of bids, open, award and NTP in one day, with work to begin immediately.
- To the extent practicable, formally advertise Federal Act projects when all project documents (plans, specs, etc.) are ready for bid. Respond to contractors' questions in a timely fashion to allow contractor community to be prepared to begin work as soon as possible.
- Utilize standard specifications and plans, minimize the use of special provisions.
- Share contract information such as type of project, estimated cost, location and projected time frame with third parties that can halt progress such as utilities, permitting and historical agencies.
- Develop means for timely Alternative Dispute Resolution.



- Support agencies' hiring of additional qualified personnel to execute this initiative.
- Additional funding for the agencies will be needed for administering, oversight and enforcement.

#### Recommendation Without Full Consensus

As noted above, one concept received general collective support but could not be adopted with full consensus.

Use of "CM At Risk" Contracting: Agency subcommittee members see CM At Risk in horizontal construction as a means of bringing the contractor into the process before design is finalized, which may allow a project to qualify for Federal Act funds even if the design is not fully complete. It should also reduce problems regarding constructability of a project. It is currently authorized for vertical construction under Massachusetts law and is used in other states for horizontal construction. This prior experience should enable CM At Risk to be implemented on appropriate horizontal projects rapidly.

The Construction Industries of Massachusetts ("CIM") was unable to endorse this recommendation due to concerns about possible contracting issues, including pricing and risk shifting. CIM noted that shifting risk to contractors may increase prices and narrow competition, and may affect contractors' ability to obtain surety bonds. CIM believes that any alternative delivery procurement method must be viewed as a team/partnership between the owner and contractor.

CIM is not adverse to the concept of CM. As an alternative, CIM has suggested CM with a negotiated fee. Also, CIM believes it is critical to ensure the awarding authority has the expertise and experienced personnel in place to effectively oversee & procure a CM job. It also feels a clear, objective prequalification process must be established specifically for each contract.

#### **Goods and Services, Information Technology and Equipment**

Several enhancements to the IT Procurement process can be implemented for projects within the Federal Act to maximize the number of IT projects that qualify for the timing provisions within the Act, specifically:

- All IT vendors submitting bids on projects funded under the Federal Act must file their bids online and file their paperwork electronically on Comm-PASS (to be followed up by paper copies). Under current OSD processes, SOMWBA certified business, among others, may apply for a hardship exemption from this requirement.
- Create Procurement Speed Teams (PSTs) which include OSD, ITD and subject matter experts. Supplement PSTs with contract resources, but exhibit caution with respect to business conflicts.
- For municipal IT and non IT equipment: use Comm-Pass instead of print ads; use sound business practices under \$10,000 and increase solicitation of three written quotes to procurements between \$10,000 and \$25,000
- If Federal Act spending focuses on specific areas of non-IT equipment, the Work Group can assemble Equipment Speed Teams if necessary.
- Maintain current internal controls and procurement processes where possible and attempt to maintain uniform procurement system when possible
- Create template RFQs and RFRs for IT procurements. OSD and ITD will provide training to state agencies and vendors on how to use the anticipated template RFQ/RFR and PST procurement methods as well as the web based procurement tools.

- OSD will research the creation of a central location on Comm-PASS for information about future and current Federal Act procurements, or the use of subcategory tagging to easily identify Federal Act projects to users, in either case to enable IT vendors to plan their bidding strategically. Within six (6) months the Comm-PASS “QuickQuote” system will be available to agencies, and can be used to speed procurements.
- Use of statewide contracts speeds procurements by avoiding the full blown RFR process. If it appears that the number of contractors on ITS33 (solutions provider and technical specialist categories) is too small, or that the contractors currently on the contract lack the requisite expertise to complete the type of projects contemplated for Federal Act funding, the IT/non IT Equipment Work Group will reconvene and discuss ways of temporarily opening ITS33 to a larger group of contractors.

## 6. Actions Needed

The recommendations in this report can be broadly categorized as “administrative” changes and “statutory” changes.

Administrative changes need to be made by each agency or authority. In many cases the extent of change will vary by organization for the same recommendation. Therefore, the Procurement Task Force recommends that each relevant agency or authority develop and report to the Governor’s designees their own implementation plan for administrative changes necessary to implement these recommendations.

Many of the recommendations require changes to the Massachusetts General Law. As indicated above, this report provides recommendations on changes to the procurement process and laws, but does not provide detailed recommendations on specific language. Therefore, the Procurement Task Force recommends that public awarding authorities work together to draft the necessary legislative changes.

Recommendation Category	Key Steps
Create an Economic Stimulus Alternate Procurement Board	<ul style="list-style-type: none"> <li>• Draft necessary legislation.</li> </ul>
Improve bid advertising information	<ul style="list-style-type: none"> <li>• Draft proposed legislation: widely publicize Federal website; collect e-mail addresses of contractors and subcontractors for direct communication.</li> <li>• Take final Federal Act project list and place on each agency’s website.</li> </ul>
Standardize Contract Provisions	<ul style="list-style-type: none"> <li>• Once legislation is drafted for final recommendations of this Task Force, contracting agencies and authorities should jointly develop whatever modifications are necessary to existing contracts.</li> </ul>
Decrease elapsed time from bid to “shovel in the ground” by enhancing the following contractor and subcontractor selection and approval process	<ul style="list-style-type: none"> <li>• Add dedicated staff and deadlines to AG’s office for bid protests.</li> <li>• Develop performance based specifications where possible.</li> <li>• Each agency should outline their process and collaborate over ways to eliminate steps and/or reduce time for each step between bid advertising and NTP.</li> <li>• Explore on line bidding were possible (and address legislative issues if necessary).</li> <li>• Schedule special board meetings to approve Federal Act</li> </ul>

Recommendation Category	Key Steps
	<p>projects.</p> <ul style="list-style-type: none"> <li>• Preapproved Economic Stimulus projects as a group.</li> <li>• Obtain Secretary approval, if applicable, at time of Board vote.</li> <li>• IG to explore development of mandatory training model for awarding authorities in order to benefit from stimulus funds.</li> </ul>
Apprenticeship	<ul style="list-style-type: none"> <li>• Draft necessary legislation and modify bid advertising and contract documents as necessary.</li> </ul>
Decrease elapsed time from bid to “shovel in the ground” by enhancing processes that relate to the following contractor procurement processes	<ul style="list-style-type: none"> <li>• Draft necessary legislation to enable changes as appropriate.</li> </ul>
Address payment and performance bonding thresholds	<ul style="list-style-type: none"> <li>• Utilize discretion in payment and performance bonding as noted and draft legislation to increase thresholds.</li> </ul>
Update threshold criteria in statutory and administrative policies	<ul style="list-style-type: none"> <li>• Draft legislation to enable recommended thresholds.</li> </ul>
Vertical Construction Recommendations	<ul style="list-style-type: none"> <li>• Draft necessary legislation to enable changes as appropriate.</li> </ul>
Horizontal Construction Recommendations	<ul style="list-style-type: none"> <li>• Draft necessary legislation to enable changes as appropriate.</li> </ul>
Goods and Services, Information Technology and Equipment	<ul style="list-style-type: none"> <li>• Draft necessary legislation to enable changes as appropriate.</li> </ul>

All of these legislative changes are recommended to be applicable only to projects funded under the Federal Act and the legislation should contain appropriate limiting and sunset language to make this clear. The Procurement Task Force plans to reconvene within 6-12 months to review the public agencies experience under the modified procurement laws to determine whether any such changes should be made permanent.

## Workforce Task Force

### 1. Introduction

The Executive Office of Labor and Workforce Development (EOLWD) has been tasked by the Governor with planning to mobilize both the state and the private workforce, including strategies to accelerate hiring and inclusion of underrepresented communities in preparation for federal funding under the anticipated Federal Act. The Workforce Task Force includes members of EOLWD who are working on workforce readiness planning along with members of other government agencies, labor, business, and civic actors to discuss ways to ensure timely provision of workforce responses to the seven Project Delivery Task Forces. The Workforce Task Force is one of three cross-cutting task forces (Permitting and Procurement are the other two) that aim to support all the areas of potential Federal Act investment.

The Task Force met five times between December 23, 2008 and January 20, 2009. Additional meetings are anticipated over the next several months. Several working groups have been established and will meet to propose detailed recommendations and implementation plans.

The work of the Task Force has been complicated by a lack of information of how much federal workforce training dollars will be available and how flexibly they can be spent. Since the beginning of December of 2008, EOLWD has been engaged with the Governor's Office in Washington, D.C, to propose language to Congress that will allow the Commonwealth enough discretionary money to adequately implement needed statewide initiatives and for movement around the state to address regional urgencies that the current allotment formulas do not allow.

A number of state agencies have actively participated in the Task Force, including the EOLWD, Housing and Economic Development (HED), Administration and Finance (ANF), and the Department of Labor (DOL). Workforce Development (DWD) and the Human Resources Division (HRD) have actively participated as well. Workforce agencies, both public and private, include the Massachusetts Workforce Investment Board, several Career Centers workforce investment boards (WIBs), and the Massachusetts Workforce Board Association. There were also representatives from Labor and the Construction industry.

The Workforce Task Force is committed to ensuring that Massachusetts residents who are unemployed are put back to work on Federal Act projects. Additionally, the Task Force supports the Governor's call for using this historic occasion to extend employment opportunities to chronically under- and unemployed communities and populations. By using the opportunities provided the Commonwealth in the economic recovery funding, we can hire and train new workers as well as get our unemployed off the bench and back to work.

### 2. Members

Name	Title	Agency / Organization
Bump, Suzanne (Chair)	Secretary	EOLWD
Anderson, Don	Career Center Director	Workforce Central Career Centers
Bower, Bob	Political Director	Massachusetts AFL-CIO
Corr, Jane	Chief of Staff	EOEEA
Correia, Tamika	Executive Director	Massachusetts Workforce Investment Board
D'Angelo, Mark	Director	Office of Employee Relations, Human Resource Division

Name	Title	Agency / Organization
Finfer, Lewis	Executive Director	Massachusetts Communities Action Network
Gillis, Don	Executive Director	Massachusetts Workforce Board Association
Gunning, Thomas	Executive Director	Building Trades Employers Association
James, Jennifer	Undersecretary of Workforce Development	EOLWD
Kelleher, Hugh	Executive Director	Plumbing, Heating & Cooling Contractors Association of Greater Boston
Langan, John	Assistant Director of Employee Relations	Human Resources Division
Lawton, Monica	CEO	Associated Subcontractors of Massachusetts
Marlow, Ron	Assistant Secretary	EOA&F
Marra, John	General Counsel	Human Resources Division
McGee, Thomas M.	State Senator	3rd Essex and Middlesex District
Mooney, Bill	Training Director	International Union of Operating Engineers Local 4, Joint Apprenticeship Training Council
Nakajima, Eric	Senior Policy Advisor	EOHED
Noel, George	Director	Department of Labor
O'Malley, Bernadette	Chief of Staff	EOLWD
Sarris, Mary	Executive Director	North Shore Workforce Investment Board
Scibak, John W.	State Representative	2nd Hampshire District
Selesnick, Judy	Executive Director	Workforce Investment Association of Massachusetts
Smith, Robb	Director of Policy and Planning	EOLWD
Snyder, Nancy	President	Commonwealth Corporation
Taylor, Michael	Director	Department of Workforce Development
Vogel, Mary	Executive Director	The Construction Institute
Wallace, David	Director	Division of Apprentice Training, Department of Workforce Development
Wright, Ellen	Director of Human Resources	Information Technology Division

### 3. Task Force Findings and Recommendations

There are three areas of concern for the Workforce Task Force: (1) Labor Demand; (2) Labor Supply; (3) Labor Policies and Standards; and (4) Public Workforce Hiring. Labor Demand relates to the need for workers and training. Labor Supply refers to the available labor pool, both those individuals skilled and ready to work and those needing some degree of training. Labor Policies and Standards refer to the mechanisms we need to put into place to accomplish the Governor's workforce priorities. Public Workforce Hiring refers to the hiring of various public workforce needs.

It is important to note that the work of the Workforce Task Force is far from over. Four Working Groups have been created to address the four main areas of concern in which issues still need to be resolved and specific details and procedures need to be articulated: Labor; Statewide Training; DWD Operations; and Public Workforce Staffing. These Working Groups will be meeting over the next several weeks to complete the specific recommendations, procedures, and other details still unresolved. Once these Working Groups complete their work, we anticipate that they will transition into implementation oversight committees, such as Monitoring & Tracking of data and outcomes and Outreach & Recruitment of chronically under- and unemployed workers. The descriptions of the Working Groups are laid out below in the "Actions Needed" section.

#### Labor Demand

##### 1.A. Labor Demand Findings

The Commonwealth Corporation began researching the labor demand for potentially-targeted industries shortly before the economic recovery task forces were formally created by the Governor. Their staff conducted interviews with industry leaders in four of the five targeted industries as well as potential training providers in the five primary sectors that are being discussed as targeted for stimulus funding: Infrastructure Projects, School Building Construction, Electronic Medical Records, Energy Efficiency, and Broadband Access.

For each industry sector identified in the Federal Act, they asked four questions (for a full list of the questions and the answers received, please see *Appendix 6 – Workforce*).

- 1) If Federal Act money becomes available for this industry what will be your initial/short-term workforce needs?
- 2) Is there a ready supply of workers or are there specific areas in which you anticipate shortages?
- 3) Kinds of occupations and skills needed, including certification and licenses?
- 4) Are there existing training vendors who you hire from or use to upgrade skills?

For four of the five industry sectors discussed as targets of the Federal Act – infrastructure, school building improvements, energy efficiency of public buildings and broadband access- a significant share of the demand is going to be in the construction trades. As we narrow down the potential projects we will need to project demand by trade or occupation by region across all of the Federal Act projects in order to develop a comprehensive picture of workforce needs.

The two occupational areas in which there may be shortages in the short-term include energy efficiency contractors to do installation and in the information technology field to implement stimulus projects in electronic medical records. In the area of electronic medical records, the demand is for more high-end programmers, sales and technical support staff and trainers. The strong tendency is to hire people with experience. There is evidence of a downturn in the technology area in the economy.

In the area of construction, as we are able to project potential shortages over the two-year period covered by the Federal Act with more precision by trade and by region, the Commonwealth should invest in Pre-Apprenticeship programs that reach out to unemployed and underemployed communities to provide the basic skills and knowledge necessary to be accepted into an apprenticeship program.

For each of the occupational areas in which there are projected shortages, developing an apprenticeship program is a proven vehicle for ensuring on the job training opportunities and classroom training for the mastery of skills necessary to earn the credentials, licenses, skills and experience. Particularly in fields that value experience and applied knowledge, apprenticeship is an effective vehicle to transition career changers and new workers into construction, energy efficiency or information technology.

There were a few themes that seemed to emerge consistently:

- In terms of school buildings, infrastructure, energy efficiency and even broadband access, much of the demand is going to be in the construction trades.
- Until there is some certainty the actual projects and can estimate demand it is difficult to know if we need to train large numbers of new workers in the building trades. There is significant unemployment among construction workers given the nature of this economic downturn, so it is possible that at least in the short-term we may be able to meet the demand for workers through putting unemployed construction workers back to work. In the energy efficiency field, some training may be needed to prepare skilled trades people with new skills to install new technologies.
- As more accuracy in estimates for additional workers is provided, will need to move quickly to create a pipeline in the trades. It seems that apprenticeship programs, vocational technical schools and other union-sponsored programs are willing and able to move quickly to expand their training programs.
- There may also be opportunities to use some of the youth employment money to support young people in training for building trades jobs either through formal apprenticeship training or opening up the vocational technical schools in the Summer of 2009 to provide intensive training with some on-the-job elements that prepare them for apprenticeship programs or less skilled trades jobs in open shop construction sites in the Fall and Winter of 2009.
- In the area of electronic medical records, the demand is for more high-end programmers, sales and technical support staff and trainers. The strong tendency is to hire people with experience. This may also present an opportunity to do some retraining specific to the health field for technical workers who have been or may be laid off in the financial services field. We need to be able to reach out quickly to workers who have been laid off with these skill sets to provide some training in the health field to meet new demand. We may need to turn to community colleges, continuing education departments of four-year colleges or proprietary schools to be able to respond quickly to specific occupational demand with a modular and customized training for IT and sales professionals from other industry sectors that is open entry/open exit.

## **1.B. Labor Demand Recommendations**

### **Addressing Statewide Training and Hiring Needs**

- Energy Efficiency Training Program: In the area of energy efficiency there are two approaches to preparing a workforce (in either case the training should be done through a partnership with two or more employers to ensure hiring, appropriate curriculum, and on the job training opportunities):
  - Upgrade the skills of seasoned trades workers (such as electricians and plumbers) to install energy efficiency products, technologies through apprenticeship programs or vocational technical schools/community colleges.
  - Prepare workers new to the energy efficiency field to install technologies that do not require licenses or high level skills (i.e. installing insulation) through vocational technical schools, community colleges or community-based organizations.

- **Energy Efficiency Retraining Program:** This may also present an opportunity to do some retraining for workers who have been or may be laid off in the financial services field. We need to be able to reach out quickly to workers who have been laid off with these skill sets to provide some training to meet new demand. We may need to turn to community colleges, continuing education departments of four-year colleges or proprietary schools to be able to respond quickly to specific occupational demand with a modular and customized training for professionals from other industry sectors that is open entry/open exit.
- **Hiring Through Career Centers:** Businesses receiving contracts to perform public works or related projects will have a goal to hire a significant percentage of the employees to work on such projects from the unemployed labor pool through the local One Stop Career Centers. The unemployed candidates would be screened, trained and processed by the One Stop Career Centers and hired by the successful contractors on the public works and related projects.

## Labor Supply

### 2.A. Labor Supply Findings

In order to respond to the Governor's calls for (1) ensuring that projects are "shovel-ready" within the 180-day "use it or lose it" period and (2) getting unemployed workers back to work as soon as possible, our first "labor supply" task was to determine how many Massachusetts residents are unemployed and in what occupations were they last employed. Although the numbers of actually unemployed persons in Massachusetts is larger than the universe of those collecting unemployment benefits, it is the latter population for whom we have data. The Task Force concluded that the most important data that is needed for matching the unemployed to new jobs are occupation and residence. The Department of Workforce Development (DWD) has information on unemployment claimants that will allow us to know how many persons are unemployed in a given occupation (down to the 6-digit Standard Occupational Code [SOC]) for each of our sixteen workforce investment areas.

DWD is working to change the normal monthly 2-digit SOC reporting on unemployment claimants to a 6-digit reporting, so that it has a more exact tool for the Career Centers to use for job matching. The Task Force envisions that this tool can be overlaid onto a map of economic recovery projects to match specific occupational demand with supply. Below is a list of frequently identified job types from the project delivery task forces.

Job Type	% Un-employment	# of Un-employed	Region of Highest Incidence
Management Occupations (11)	11.1%	17,454	Metro SW
Project Estimator (13-1051)		115	Metro SW, Bristol
Computer Software Engineers, Applications		959	Metro SW, Metro North, Lower Merrimack
Computer Software Engineers, Systems Software		328	Metro SW, Metro North, Lower Merrimack
Architecture & Engineering	2.1%	3,349	Metro SW, Metro North, Lower Merrimack, Bristol
Electrical		236	Metro SW, Metro North, Lower Merrimack, South Coastal
Civil		96	Metro SW, Metro North, Lower Merrimack
Office & Admin Support	14.9%	23,452	Boston, Bristol, Metro North



Job Type	% Un-employment	# of Un-employed	Region of Highest Incidence
Construction & Extraction	16.9%	26,682	Bristol, South Coastal, Lower Merrimack Hampden
Construction Laborers		8,563	Bristol, New Bedford
Operating Engineers & Other Construction Equipment Operators		1,203	Bristol, Lower Merrimack
Electrician		2,037	South Coastal, Lower Merrimack, Brockton, Bristol, Boston
Plumbers		1,691	Lower Merrimack, South Coastal
Roofers		587	Hampton, Bristol

The most recent data we have on unemployment from December, 2008, shows nearly 27,000 construction workers collecting unemployment benefits. Using the Project Delivery Task Force job estimation methodology, we can expect about 14,000 jobs per billion dollars of horizontal construction and 9,000 jobs per billion dollars of vertical construction. Given the high level of unemployment in the construction trades, at this point in time it appears that the immediate (180-day) demand for skilled trades can completely or largely be met by unemployed construction workers.

Given the need to analyze and act on demand and supply data to address potential shortages by trade and by region, EOLWD needs to act as the clearinghouse and broker to maintain and report on the demand and supply data by region across all of the stimulus projects in the Commonwealth.

Our next “labor supply” task is look ahead to preparing workers over the two-year timeframe of the economic recovery program. It is in this time-frame that we may be able to best address the needs of those individuals who are chronically under- and unemployed. (We can address some of this need through apprentice training programs within the 180-day period. However, a large number of these individuals are not qualified to enter apprentice training programs and remedial education and other training is necessary.) The Task Force identified needs for investment in adult literacy, (Graduation Equivalency Degree (GED) and English for Speakers of Other Languages (ESOL) programs. The Commonwealth should consider investing any new training funds in computer-based literacy and ESOL that could be provided at career centers, public libraries and other community settings. Volunteers through the Commonwealth Corps or other community service programs could provide tutoring to support and enhance computer-based programs.

If there are additional funds through the Workforce Investment Act for training dislocated workers, the Commonwealth should consider investing those resources into training programs that integrate basic skills, GED preparation, pre-college and ESOL with occupational skills training for direct and indirect jobs that are created through the Federal Act. Any new training programs should be required to accelerate, integrate and intensify learning to ensure that students complete the training and are able to attain employment in their field in as short a time period as possible.

## 2.B. Labor Supply Recommendations

### Bolstering the Commonwealth’s Workforce System

- EOLWD Clearinghouse: EOLWD will develop an efficient and effective system through career centers (and working with building trades hiring halls) to identify, contact and connect unemployed construction workers to hiring opportunities created through the Federal Act in a

timely manner. This will require having some ability to do matching of job postings with job seekers in the career centers and UI claimant data base, having accurate contact and occupation information and having staff capacity to dedicate to this brokering function.

- Regional Network: EOLWD will work with the 16 workforce investment boards to facilitate the collection and dissemination of employment data to the regions. The boards will work with local apprentice training programs, labor unions, community colleges, businesses, municipal leaders, and other stakeholders to ensure efficient and effective matching of job openings and training opportunities to under- and unemployed Massachusetts residents.
- Network of Regional Apprentice Preparedness Programs (APPs): A number of APPs should be developed across the state in partnership with the building trades training directors and apprenticeship programs to ensure that the curriculum reflects the entry requirements for the apprenticeship program and that there are actual apprenticeship opportunities upon completion of the Pre-Apprenticeship program. The Building Trades Apprenticeship Training Programs and the vocational technical schools have indicated a willingness and ability to move quickly to add apprentices in response to demand.
- Basic Skills, GED, ESOL, and related programs: Continue to support and expand upon these programs, where resources are available. Many of these programs will receive additional funding in the Federal Act.
- IT Needs: The Task Force wants to stress the importance of four IT projects that have been submitted through the IT Task Force by EOLWD. These projects are important to efficiently and effectively implementing our workforce capacity plan.
  - Workforce Development Application Upgrade and Data Warehouse
  - Network Infrastructure Upgrade
  - DWD Data Center Backup Replacement / Business Continuity Operations
  - Oracle Technology Upgrade Project
- Expedited Public Workforce Staffing Plan: Establish an expedited and flexible hiring process to identify and hire appropriately skilled employees to help stimulate a broad based economic recovery through the Federal Act. Leverage the opportunity presented by the Federal Act program to achieve:
  - Increase diversity by establishing diversity goals for women, minorities and persons with disabilities consistent with federal census data on available workforce by job type.
  - Reach out and target chronically unemployed and underemployed citizens for job training apprenticeship opportunities.

Our challenge will be to create the right balance of compliance and reporting requirements to insure transparency and accountability without jeopardizing the primary goal. One option to minimize duplicative and burdensome administrative oversight would be to establish one point of entry for all job applicants. This could streamline, standardize and quality control the applicant data at the time of application. While this option has many positives, it could prove time-consuming and complicated to implement across agencies, different branches of government and possibly even across municipalities.

## Labor Policies and Standards

The Workforce Task Force was especially interested in the use of apprentice training programs to implement the Governor's economic recovery priorities. Apprenticeship is a career training program that combines paid on-the-job training with classroom instruction. Apprentice programs can be established by an individual employer, a group of employers, or a labor union. Despite popular conception, apprentice training programs are not limited to building trades occupations. According to the Department of Apprentice Training there are over 850 occupations that utilize apprentice training

programs throughout the country. There are over 400 employers that have registered apprentice programs, and several thousand employers who have apprentices through collective bargaining agreements with labor unions. Apprenticeship training is one of the best routes to the middle class, one of the most cost-efficient workforce development tools, and the most affordable option available to both workers and employers.

Employers with registered apprentice programs are more likely to be Massachusetts employers. In order to have a registered apprentice program in the Commonwealth, an employer must have an office here, or, if an out-of-state contractor, its state must have a reciprocal agreement with Massachusetts. If the purpose of the Federal Act is not just to create jobs, but to create jobs that will have a long-term benefit to our economy and to include all citizens, the long-term unemployed and otherwise disadvantaged populations, an apprentice training requirement is essential. And there are thousands of unemployed apprentices who are ready, willing, and able to work. But such a requirement cannot interfere with the objectives of getting projects started quickly and making projects available to a wide population.

In recognition of these benefits of apprentice training, and mindful of the concerns, a Labor Working Group from the Procurement Task Force, comprised of representatives from non-union and union contractors associations, the building trades union, and state and local governments that procure public works projects, reached the following consensus on an apprentice training requirement for public works projects under the Federal Act, where the amount of construction costs under any contract awarded is likely to exceed \$1 million. The Workforce Task Force endorses this consensus:

- 1) The specifications set forth in the Request for Responses shall require that, on a per project basis, no less than twenty percent (20%) of the total hours of employees receiving an hourly wage who are directly employed on the site of the project, employed by the contractor or any subcontractor, and subject to the prevailing wage, shall be performed by apprentices in a bona fide apprentice training program, as defined by M.G.L. c. 23, sections 11H & 11I that is approved by the Division of Apprentice Training of the Department of Labor & Workforce Development of the Commonwealth.
  - The Labor Working Group recognizes that this proposal may pose challenges for the filed sub-bid requirements of Section 44F of Chapter 149 of the General Laws, and that additional steps may be necessary to reconcile the proposal with those requirements.
  - During the performance of the contract, the contractor shall submit periodic reports to the awarding authority with records indicating the total hours worked by all journeymen and apprentices in positions subject to the apprentice requirement. In any instance in which the apprentice hours do not constitute twenty percent of the total hours of employees subject to the apprentice requirement, the contractor shall submit a plan to the awarding authority describing how the contractor shall comply with the apprentice requirement.
- 2) An awarding authority or a contractor may adjust these requirements if the assigned federal oversight body determines that, despite a good faith effort, and due to unavoidable circumstances, such as a demonstrated lack of apprentices in a specific geographic area, compliance with these requirements is not feasible.
- 3) An awarding authority serving a low-income population may require additional specifications that address the needs of its clients, such as preferential hiring for residents of public housing authorities for available apprenticeship positions.
- 4) Providing additional financial resources are available, the Division of Apprentice Training shall enhance its outreach efforts to underserved populations to increase and diversify the number of apprentices in the Commonwealth.

The Procurement Task Force takes no position on apprentice training programs for non-publicly bid construction projects because it is beyond the scope of their jurisdiction. The Workforce Task Force recommends the use of apprentice training programs in all occupations that can utilize them. To that end the Workforce Task Force Labor Working Group will be addressing ways to operationalize and implement this recommendation over the next few weeks.

Among the other recommendations of the Task Force are:

- Project Labor Agreements: The Task Force recommends that the Commonwealth require or encourage (depending on legality) the use of PLAs on large construction projects, which would additionally include hiring requirements, dedicated training money for a fund such as the Workforce Training Fund, and a process to link APPs with Apprentice Training Programs and building trades unions and contractors.
- Staffing Needs for Division of Apprentice Training: To provide adequate support and service regarding the increased use of apprentice training programs, DAT has calculated that it will need, at a minimum, the following staff:
  - 2 Field Staff (total compensation of \$120,000)
  - 1 Assistant (total compensation of \$70,000)
  - 1 Office support (total compensation of \$50,000)
  - Total staffing request is \$240,000
- Staffing Needs for Division of Occupational Safety: The infrastructure projects (building and transportation projects) associated with the Federal Act will all be subject to the Massachusetts prevailing wage law. The Division of Occupational Safety (DOS) administers that law (G.L. c. 149, §§ 26 and 27, *et. Seq*). (Please see *Appendix 4 – Procurement* for relevant details on this law).

A recent amendment to the law also requires awarding authorities to request, and DOS to furnish annual updates to the prevailing wage rate sheets. DOS issues an average of 750 prevailing wage rate sheets per month,<sup>9</sup> except during the months of March through June, when it issues between 900 and 1,000 sheets per month due to increased procurement in advance of the construction season. During these busy months, DOS's staff, which consists of one attorney and one administrative assistant, is working at full capacity, and often delaying other work in order to keep up with the demand. In addition to issuing prevailing wage rate sheets upon request by the awarding authorities, DOS answers hundreds of telephone inquiries every month from procurement officers, contractors and others related to their obligations under the prevailing wage law, the proper classification of specific work on a project, etc. Additionally DOS issues official determinations of the proper classification of work on construction projects for prevailing wage purposes.

Depending upon the number of projects ultimately funded through the stimulus, it is expected that there will be a significant increase in requests for prevailing wage rate sheets, in telephone inquiries and formal determination requests. The inquiries are likely to increase more dramatically because of the plan to delegate procurement authority to agencies that do not routinely procure public construction projects (*see Section 4, Procurement Task Force Report*). At current staffing levels DOS could not process the additional requests for prevailing wage rate sheets in a timely manner, which would result in delays to the procurement process as the rate sheets must be included in the bid documents.

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<sup>9</sup> Without the inclusion of annual updates under the recent amendment, the first of which will be issued in August 2009. This amendment did not include any additional staff, and the impact on our ability to furnish prevailing wage rates in a timely manner is unknown at this time.

Further, the one attorney who handles all prevailing wage inquiries, in addition to his responsibilities for administering the minimum wage program, would be unable to provide timely advice to procurement officers and contractors who call with questions about their obligations, or the proper classification of work on a particular job.<sup>10</sup> Additionally, this attorney regularly participates in the Inspector General's training program for procurement officers. The IG has indicated the intention to increase the number of training opportunities available in order to ensure that new or inexperienced procurement officers will understand their obligations. This will place an additional burden on the same one attorney.

If DOS were unable to fulfill its responsibilities for administering prevailing wage rate sheets, providing guidance and making determinations in a timely manner, the result would be a delay in the procurement process. DOS has estimated that it will need one additional attorney and one additional administrative assistant to supplement our staff during the stimulus period to handle the increased volume. The estimated annual costs are as follows:

- Counsel (total compensation of \$51,000)
- Administrative Assistant (total compensation of \$36,000)
- PC and Printer (total cost of \$1,600)
- Total staffing and equipment request is \$88,600

## **Public Workforce Hiring**

### HRD/ANF ACTION PLAN for Internal Staffing:

When an agency is impacted by the Federal Act, the Human Resources Division (HRD) along with the Executive Office for Administration and Finance (ANF) and the Office of Diversity and Equal Opportunity (ODEO) will work with the impacted agency to:

- 1) Develop and support an expedited recruitment and staffing plan at the agency level.
- 2) Establish a flexible mix of agency staffing options.
- 3) Further streamline and delegate HRD internal controls to expedite the hiring process.

### **1) HRD/ANF will immediately begin work with Agencies to prepare for resourcing Federal Act projects**

HRD and ANF will reach out and work with state agencies to:

- Develop recruitment and outreach programs to staff potential projects (we will coordinate with DET and ELWD career centers).
- Establish appropriate agency staffing levels to facilitate an expedited recruitment, selection and hiring process.
- Identify appropriate diversity goals.
- Develop streamlined and delegated internal hiring controls at the agency and Secretariat level.

### **2) HRD/ANF will help agencies utilize a flexible staffing plan where appropriate:**

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<sup>10</sup> As one of the goals of the stimulus is to provide opportunities to small, minority and women-owned business who have not historically performed public work, DOS anticipates that there will be an even greater demand for guidance from our staff as these contractors move through the process and work through issues related to which rate applies.

#### **Hiring regular employees:**

- By working with organized labor, the Commonwealth will pursue certain measures to establish more flexible hiring guidelines for employing regular state employees on time bound or temporary projects. In addition to potentially speeding up the hiring process and attracting a wider talent pool, allowing agencies to hire regular employees allows the Commonwealth to develop some “bench strength” to address our succession planning needs as the boomer generation retires, the economy improves and the demand for talent increases.

#### **Use of Post-retirees:**

- Agencies can also deploy post-retirees to 120-day appointments as part of their staffing. These post-retirees can bring many years of direct experience to a project and could dramatically reduce the training and ramp-up time for stimulus projects. Post-retirees are only available to work a finite amount of time based on retirement law, usually about half-time or full-time for six months.

#### **Use of Vendors/Consultants:**

- In some cases vendors can provide a ready source of both personnel and equipment to perform the required work. If vendors are known entities and have been pre-approved from a procurement standpoint, resources can be acquired quickly. However, it is important to note that if the vendor employees are performing bargaining unit work (work which is normally performed by union employees), issues may arise where the unions contest an illegal transfer of bargaining unit work. In these cases, it will be important to work closely with agencies to ensure that all applicable laws are followed.

#### **Use of Contract Employees:**

- The advantage of contract employees is that they can be hired quickly and let go at the conclusion of a project without impacting other agency operations through the bumping process. However, it is necessary to be careful to abide by existing collective bargaining obligations not to transfer bargaining unit work. There are occasions, however, where there is language specifying that the federal funds cannot be used to pay for regular state employees or that regular employees are not qualified for the specific work. HRD would lift all hiring control flags on relevant contract positions.

### **3) HRD/ANF will streamline many internal hiring controls and increase agency delegation and oversight for stimulus projects.**

In the event that an agency is impacted by a particular stipulation in the Federal Act, the HRD along with the ANF would meet with the agency(s) review their hiring proposal. As 95% of the time it takes to fill a position is controlled by the Secretariat and agency, HRD would work with and strongly encourage secretariats to streamline and delegate their hiring controls as well, in order to expedite the hiring process. Based on the agency's business needs HRD and ANF would choose from the following options to expedite the hiring process.

#### **Hiring of Bargaining Unit Employees:**

- *Classification* – Delegated to agencies (current policy).
- *Compensation* – HRD would allow for maximum flexibility that is allowed under the collective bargaining rules (most significantly HRD would allow agencies to hire above 15% increases without HRD approval, agencies would still base salary increases on the number of years of comparable service).
- Posting process:
  - Agencies can waive the CEO posting process where they had a ready defined pool of qualified candidates.

- Postings could also be continuously posted in order to facilitate a steady stream of applicants for the jobs needing to be filled.
- Gain agreement from unions to waive 10 day internal promotional requirements under current collective bargaining agreements.
- *Minimum Entrance Requirements (MER)* – In cases where the MERs prove to inhibit effective recruitment, we will work to adjust them as necessary. The Chief Human Resources Officer would waive MER's as needed on a case by case basis.

#### **Hiring of Managers:**

- *Classification* – Would be delegated to the agencies that have trained Hay evaluators subject to post audit by HRD. This would include benchmark titles as well agency heads and their direct reports. Questionable classifications would be class flagged by HRD but allowed to proceed in order to expedite the hiring process. For agencies who do not have trained evaluators, HRD would expedite approval of submissions within 24 to 48 hours. HRD could train agency evaluators as needed.
- *Compensation* – HRD would continue to allow the application of comparable years of service for the purpose of quartile placement and the setting of salaries. Additionally, HRD would allow agencies to hire above 15% increase without HRD approval, assuming the years of comparable service
- Posting process:
  - Agencies could waive the CEO posting process.
  - Postings could also be continuously posted in order to facilitate a steady stream of applicants for the jobs needing to be filled.
- *Minimum Entrance Requirements (MER)* – The Chief Human Resources Officer would waive MER's as needed on a case by case basis.
- *CORI Check* – Will work with the Executive Office of Public Safety (EOPS) to expedite the Criminal Offender Record Information (CORI) check process where appropriate.

## **4. Actions Needed**

### **Key Steps**

The Task Force has created several working groups that are charged with compiling a menu of specific recommendations to implement its policy recommendations. The working groups are:

1. **Labor Working Group:** This group will recommend specifics on the use of apprentice training programs in non-construction occupations (and construction occupations, if the issue is not already settled) and the feasibility of using PLAs to address hiring and training goals as well the timely performance of projects.

#### ***Workforce Task Force Policy Positions relevant to this Working Group:***

- Apprentice Training Program Requirements: The Task Force recommends the establishment of a requirement for projects to utilize bona fide apprentice training programs. We are generally in agreement with the Labor Working Group for the Procurement Task Force of a 20%/\$1 million threshold for construction occupations. The Workforce Labor Working Group will recommend options for apprentice requirements for non-construction occupations.
- Project Labor Agreements: The Task Force recommends that the Commonwealth require or encourage (depending on legality) the use of PLAs on large construction projects, which would additionally include hiring requirements, dedicated training money for a fund such as the Workforce Training Fund, and a process to link APPs with Apprentice Training Programs and building trades unions and contractors.

- Hiring Through Career Centers: Businesses receiving contacts to perform public works or related projects will have a goal to hire a significant percentage of the employees to work on such projects from the unemployed labor pool through the local One Stop Career Centers.
- The unemployed candidates would be screened, trained and processed by the One Stop Career Centers and hired by the successful contractors on the public works and related projects.

**2. Statewide Training Working Group:** This group will recommend specifics on our statewide training initiatives and the use of EOLWD as a clearinghouse of workforce information.

***Workforce Task Force Policy Positions relevant to this Working Group:***

- Energy Efficiency Training Program: In the area of energy efficiency there are two approaches to preparing a workforce (in either case the training should be done through a partnership with two or more employers to ensure hiring, appropriate curriculum and on the job training opportunities):
  - Upgrade the skills of seasoned trades workers (such as electricians and plumbers) to install energy efficiency products, technologies through apprenticeship programs or vocational technical schools/community colleges; and,
  - Prepare workers new to the energy efficiency field to install technologies that do not require licenses or high level skills (i.e. installing insulation) through vocational technical schools, community colleges or community-based organizations.
- Health Care Retraining Program: This may also present an opportunity to do some retraining specific to the health field for technical workers who have been or may be laid off in the financial services field. We need to be able to reach out quickly to workers who have been laid off with these skill sets to provide some training in the health field to meet new demand. We may need to turn to community colleges, continuing education departments of four-year colleges or proprietary schools to be able to respond quickly to specific occupational demand with a modular and customized training for IT and sales professionals from other industry sectors that is open entry/open exit.
- Network of Regional Apprentice Preparedness Programs: A number of APPs should be developed across the state in partnership with the building trades training directors and apprenticeship programs to ensure that the curriculum reflects the entry requirements for the apprenticeship program and that there are actual apprenticeship opportunities upon completion of the Pre-Apprenticeship program. The Building Trades Apprenticeship Training Programs and the vocational technical schools have indicated a willingness and ability to move quickly to add apprentices in response to demand.

**3. DWD Planning Working Group:** This is an internal DWD effort, which other Task Force members have been invited to join, which has pre-existed the establishment of the Task Force and is considering operational issues across the workforce systems to efficiently and effectively deliver workforce data and programs under the economic recovery act.

***Workforce Task Force Policy Position relevant to this Working Group:***

- EOLWD Clearinghouse Recommendation: EOLWD will develop an efficient and effective system through career centers (and working with building trades hiring halls) to identify, contact and connect unemployed construction workers to hiring opportunities created through the stimulus package in a timely manner. This will require having some ability to do matching of job postings with job seekers in the career centers and Unemployment Compensation claimant data base, having accurate contact and occupation information and having staff capacity to dedicate to this brokering function.

**4. Public Workforce Working Group:** HRD is coordinating this in-house and will use this group to further hone its proposal on hiring of public workforce positions. (This is an internal HRD working group).



## **Metrics for Measuring Success**

It is expected that metric guidelines will be distributed by as part of the Federal Act. The Workforce Task Force will collect and report these metrics. Additionally, working groups are engaged in creating metrics for the specific recommendations that are being developed. Once metrics are identified, working groups will undertake planning for monitoring and measurement.

## IV. Project Information

### Project List Summary

The project information collected across task forces was consolidated in a standardized project list with 57 data fields. Each task force maintained its own list and made the necessary updates after revisions related to the elimination of duplicates (both within and across task forces), inclusion of additional data (i.e., readiness criteria) and or updates in existing project information (i.e., project cost).

The consolidated project lists allow the Commonwealth to have a holistic view of the potential projects that may be eligible for funding via the Federal Act across key areas and regions. The project list is meant to be a living document. It will need to be constantly updated to reflect not only the changes driven by the Federal Act, but also the enhancements achieved in terms of data gaps, duplicates and non-standard data definitions. The current lists need to be updated on a continuous basis to avoid the following results:

- **Project duplicates:** while internal duplicates (within a taskforce) have been minimized; the current challenge is to identify and eliminate external duplicates (across task forces with overlapping functions).
- **Non-standard data definitions:** although a good portion of the data has been cleaned up or updated to maintain standard data definitions more data cleansing needs to take place.

There are two different project lists presented below:

1. **State-Reviewed, “Shovel-Ready” Project List** – Projects preliminarily determined by state agencies to meet the 180-day project readiness standard and to further Task Force objectives following a diligent evaluation of projects undertaken by the relevant agencies.
2. **Unreviewed List of Projects Submitted for State Consideration** – Projects submitted to Task Forces by municipalities or third parties that have not yet been independently reviewed by state agencies for project readiness and for furtherance of the objectives developed by the related Task Force.

*Note:* For DCAM projects that have been bundled, if a project/bundle is at a single site, the site is identified in the Project Title column. When the bundle includes work at multiple sites, the sites are noted in the Description column. Each line on the spreadsheet represents a bundle and all project bundles are limited to single agencies—no project bundle includes more than one agency.

DCAM has taken the approach of bundling projects to make the bidding process more efficient and expedient, thereby enabling projects to be bid-ready as soon as possible. The overall approach is to develop the scope and bid packages for these projects with the support of DCAM staff and outside contracted engineering firms. Once the bid packages are ready, DCAM will bid them and manage the construction. For bundles that are for an estimated cost less than the approved project delegation thresholds (currently \$1 million), the bid documents and funds would be provided to the agencies to bid. Agencies will be trained on the procedures for bidding and managing these projects. DCAM will oversee the delegated projects to ensure that spending occurs as required.

## Data Fields

Project Information—Data Fields		
<ul style="list-style-type: none"> <li>• Task Force</li> <li>• ID</li> <li>• Project Title</li> <li>• Public Entity</li> <li>• Agency</li> <li>• Location of Entity/Agency (City or Town)</li> <li>• Other Proponent(s)</li> <li>• Project Description</li> <li>• Project Objectives</li> <li>• Metrics for Success in Meeting Objectives</li> <li>• Gaps or Barriers to Meeting Objectives</li> <li>• Plans to Mitigate Gaps or Barriers</li> <li>• Evidence of Ability to Execute</li> </ul>	<ul style="list-style-type: none"> <li>• Indicate Ability to Execute</li> <li>• Estimated Total Project Cost</li> <li>• Existing Funds for Project</li> <li>• Total Federal Stimulus Amount Requested</li> <li>• Other Possible Sources of Funding</li> <li>• Source for Existing or Other Funds</li> <li>• Earliest Start Date</li> <li>• Expected Finish Date</li> <li>• Readiness: Is Design Complete?</li> <li>• Readiness: Sight or Right of Way Acquired?</li> <li>• Readiness: Is MEPA Review Completed?</li> </ul>	<ul style="list-style-type: none"> <li>• Readiness: Can Procurement be Completed and a Notice to Proceed be Issued within 180 days?</li> <li>• Readiness: Are all required permits complete?</li> <li>• Readiness: Other Considerations</li> <li>• Number of Jobs Created (individual methodology)</li> <li>• Number of Jobs Created by SOC Code (individual methodology)</li> <li>• Number of Jobs Created (standard methodology)</li> <li>• City/Town</li> <li>• Zip Code</li> <li>• GIS Coordinates</li> </ul>

## Definitions

Project Information Data Fields	
Field	Definition
Task Force	Seven Project Delivery Task Forces were created to identify “shovel-ready” infrastructure projects. Each of these task forces is identified on the project list. They are labeled: Energy, Education, Transportation, IT, Private Development, State Facilities, and Municipal. Within some task forces projects are identified by task force and agency/department (e.g. State Facilities – DCAM). If projects have been “bundled” (grouped for procurement purposes) that is also identified.
ID	Each task force collected projects independently, and some task forces had pre-established numeric IDs that they assigned to their projects. These values are represented in the ID field.
Project Title	Each task force provided a project title for their projects.
Public Entity	Task Forces used this field to provide the department or division name, municipality name, or other information about the public agency sponsoring the project or the location of the project.
Agency	The agency, department or entity that submitted to the project to the task force.

Project Information Data Fields	
Field	Definition
Location of Entity/Agency (City or Town)	Location of the entity/agency submitting the project.
Other Proponent(s)	A public or non-public entity proponent of the project, in addition to the agency, department and task force submitting the project.
Project Description	A brief description of the project.
Project Objectives	Identifies one or more project objectives that are specific and measurable.
Metrics for Success in Meeting Objectives	Identifies one or more metrics and corresponding explanations to be used to measure the progress of the project towards meeting the stated objectives.
Gaps or Barriers to Meeting Objectives	Identifies all key gaps or barriers that could prohibit the project from successfully commencing within 180 days and/or meeting the stated project objectives.
Plans to Mitigate Gaps or Barriers	Identifies plans the task force has identified to overcome gaps or barriers so that the project can commence within 180 days and meet the stated project objectives.
Evidence of Ability to Execute	Explanation of evidence that the project proponent (or the public agency carrying out the project for the benefit of a non-public project proponent) can effectively execute a project of this type and scale.
Indicate Ability to Execute	Ability to execute was identified by one of the following answers: A. Yes, based on successful comparable prior experience. B. No, but the proponent is contracting or partnering with such an entity. C. No.
Estimated Total Project Cost	Anticipated total cost to complete the project. This value is larger than the Total Federal Stimulus Amount Requested when the project has already started and has secured funding from other sources.
Existing Funds for Project	Funding already secured to support the project. This field was used for projects that have already secured funding from other sources to identify the dollar amount and/or source of funds secured already.
Total Federal Stimulus Amount Requested	Total funds requested from the Federal Act to support the project.
Other Possible Sources of Funding	Other public or non-public funds that could be used to fund the project.
Source for Existing or Other Funds	Source of other public or non-public funds that will be used to fund the project.
Earliest Start Date	The earliest date that the project could commence.
Expected Finish Date	The expected project completion date.
Readiness: Is Design Complete?	Indicates if the project has been designed.
Readiness: Sight or Right of Way Acquired?	Indicates whether a required sight or right of way has been acquired in order for the project to commence.

Project Information Data Fields	
Field	Definition
Readiness: Is MEPA Review Completed?	Indicates if the required Massachusetts Environmental Policy Act (MEPA) review has occurred. MEPA requires that state agencies study the environmental consequences of their actions, including permitting and financial assistance. It also requires them to take all feasible measures to avoid, minimize, and mitigate damage to the environment. This is required for projects above a certain size that involve some state agency action.
Readiness: Can Procurement be Completed and a Notice to Proceed can be Issued within 180 days?	Indicates whether a Notice to Proceed (NTP) can be issued within 180 days, therefore indicating that the project can be “shovel-ready” within 180 days. Projects typically can start the day after the NTP is issued.
Readiness: Are Permits from Multiple Permitting Agencies Required?	Indicates if permits from multiple agencies are required. Permits from multiple agencies require more time to secure and therefore could impact a projects’ ability to be “shovel-ready” within 180 days.
Readiness: Are all required permits complete?	Indicates if permits must be secured before a project commences.
Readiness: Other Considerations	Explanation of any other barriers to project readiness that exist beyond the readiness questions asked.
Number of Jobs Created (individual methodology)	Agencies used their own job creation methodology to estimate the number of jobs their projects would create.
Number of Jobs Created by SOC Code (individual methodology)	Agencies estimated the number of jobs their projects would create by Standard Occupational Classification (SOC) code. Unemployment claimants report the SOC code for their job skills. The purpose of this data is to match the unemployed with the jobs being created.
Number of Jobs Created (standard methodology)	A standard job creation methodology has been used for all horizontal and vertical construction jobs. This methodology estimates jobs by project along the following guidelines: <ul style="list-style-type: none"> <li>• 14,000 jobs per Billion dollars of Horizontal construction (multiply the total project \$ value by 0.000014)</li> <li>• 9,000 jobs per Billion dollars of Vertical construction (multiply the total project \$ value by 0.000009)</li> </ul> The IT Task Force used its own job creation methodology.
City/Town	City/town where the project is located.
Zip Code	Zip code of the project.
GIS Coordinates	GIS coordinates of the project.

## **V. Appendices**

- 1. Development Cabinet Infrastructure Priorities**
- 2. Information Technology (IT)**
- 3. Private Development**
- 4. Procurement**
- 5. State Facilities and Courts**
- 6. Workforce**

## Appendix 1: Development Cabinet Infrastructure Priorities

### Statement of Administration Priorities for Transportation and Other Infrastructure Investments

The Patrick/Murray Administration is committed to implementing the Commonwealth's sustainable development principles by ensuring that state funds used for transportation and other infrastructure investments are consistent with these principles to the greatest extent possible. To that end, it is the goal of the Administration that infrastructure investments using state funds advance at least one, and preferably two or more, of the following objectives, without adversely affecting the other objectives:

- Support job creation in key Massachusetts industry sectors
- Support the creation of new workforce housing
- Support clean energy production or use
- Reduce energy consumption and/or greenhouse gas emissions
- Promote mobility and/or reduce congestion
- Support development within growth districts
- Support redevelopment projects in Gateway Plus cities
- Support other smart growth development projects

It is also the goal of the Administration that funding be awarded to transportation and other infrastructure investment projects that are ready to proceed (that is, projects that are likely to proceed expeditiously from design and permitting to construction, based on adequate staffing and financial support and based on appropriate due diligence regarding engineering, permitting and cost issues).

It is also the goal of the Administration that funding be awarded to projects for which contractors pay livable wages (where applicable, prevailing wages), provide health insurance benefits and maintain and participate in a bona fide apprentice training program.

#### Notes:

The first goal does not apply to transportation or other infrastructure spending directed to the repair or replacement of infrastructure that does not expand capacity.

It is understood that there will always be worthwhile infrastructure investments that do not meet these goals. The objective of the Administration is that the substantial majority of its infrastructure investments will meet these goals, and that all investments will do so to the extent possible.

## **Implementation**

The program administrators for the state infrastructure programs listed below will be informed that, effective immediately:

1. Prior to making any final investment decisions, they must now document whether a state infrastructure investment meets these goals (and if so, how), or provide an explanation as to why the investment is otherwise worthwhile. A standard format for this documentation will be prepared, not expected to exceed one page in length.
2. At the each of each fiscal year, they will be required to report on the extent to which these goals were met by their investments for the year.

The logistics of the implementation will be worked out in the periodic coordination meetings held for the program administrators, which are led by Undersecretary Gonzales and Undersecretary Bialecki.

Results of the implementation of the policy will be reported back to the Development Cabinet.

Applicable Programs:

MORE  
CDAG  
PWED  
STRAP  
TOD  
RAILCAP  
WATCAP  
Off-Street Parking  
SRF  
DIF  
I-Cubed  
Seaport Advisory Council



## **Appendix 2: Information Technology (IT)**

The appendices include the following:

- Appendix 2A: Scoring System for IT Projects
- Appendix 2B: Job Estimates Summary and Methodology
- Appendix 2C: eHealth Projects Recommendations Details
- Appendix 2D: eHealth – Potential Cost Savings
- Appendix 2E: eHealth – Potential Cost Avoidance
- Appendix 2F: eHealth – System Performance

## Appendix 2A: Scoring System for IT Projects

Below is the recommended approach to prioritizing IT projects. The database contains the following information about each project:

1. Project Identification
  - a. Project Title
  - b. Secretariat
  - c. Department
  - d. Location
2. Project Description and Objectives
  - a. Project Description
  - b. Measurable objectives
  - c. Metrics for Success in Meeting Objectives
  - d. Gaps or Barriers
  - e. Plans to Mitigate Gaps or Barriers
3. Project Schedule
  - a. Earliest Start Date
  - b. Expected Finish Date
  - c. High-Level Milestones
  - d. Expected Completion Date-Each Milestone
4. Project Staffing
  - a. Est. Number of Full-time employees
  - b. Est. Number of Contractors
  - c. Expected Job Titles
  - d. Expected Job Skills
5. Project Costs

In addition to these categories, the database also contains information about the benefits and improvements for Massachusetts citizens. The flexibility of the database allows for projects to be re-analyzed in accord with changing criteria and with the parameters of the Federal Act once they are finalized.

The scoring tool includes the Federal Act goals, the Governor's guiding principles, the alignment with Secretariat and Commonwealth strategic priorities, and a risk/complexity assessment. The following table shows the numerical weighting system built into the tool.

Criterion	Scoring Detail	Descriptor	Max Points
<b>Start in 180 days?</b>	Self reported factor indicates a project is ready (5) or not (0)	Binary score	5.00
<b>Completed in 2 years from January 20th?</b>	Reflects whether the self reported project end date is before Jan. 20 2011 (5) or is not before (0)	Binary score	5.00
<b>Weighted Score</b>	Place holder for in the version dated 01042009. Should any column need to be prioritized and weighted above others, this will be the factor multiplying the results.		
<b>Current Project Stage</b>	Preference is given to projects in farther stages of development, those that are closer to		5.00

Criterion	Scoring Detail	Descriptor	Max Points
	procurement.		
	1.25	Level 1: Initiation- Project charter, high level scope complete	
	2.50	Level 2: Planning and Design – project planning complete, resource needs and timeline in place	
	3.75	Level 3: Procurement Started – Draft RFQ developed	
	5.00	Level 4: Procurement Ready – Final RFQ developed	
<b>Operating Budget Impact</b>	Preference is given to projects that improve operating budget outlooks over those that add burdens to operating budgets.		5.00
	1.25	Will increase operating budget	
	2.50	No change to operating budget	
	3.75	Modest decrease in operating budget	
	5.00	Significant decrease in operating budget	
<b>Project Mix/Job Impact</b>	With each 10% increase in total funds being dedicated to labor/employment, the project receives a (.5) point increase in score. Preference is given to those projects dedicating more funds to labor than to hardware or software.		5.00
<b>Employment Score-Self Reported</b>	Drawing from the sum of the reported factor indicating the estimated number of full time employees a project is likely to require/create, this score grants preference to those projects that require/create higher numbers of jobs.		5.00
	0.00	No labor required	
	1.00	1-10 FTEs	

Criterion	Scoring Detail	Descriptor	Max Points
	2.00	11-20 FTEs	
	3.00	21-50 FTEs	
	4.00	51-200 FTEs	
	5.00	> 200 FTE	
<b>Employment Score-Calculated</b>	Similar to the Self Reported Employment Score in its preference to more labor, this version estimates the number of FTEs based on the Project Mix/Job Impact reported as compared to the total project costs		
	Score is same break down as self reported (0, 1-10, 11-20, 21-50, 21-200, greater than 200)		
<b>Total Governor's Federal Act Points</b>			<b>30.00</b>
<b>Project Risk</b>	Preference is given to lower risk projects over those with higher risks.		2.50
	2.50	Minimal	
	1.75	Moderate	
	1.00	High	
	0.25	Very High	
<b>Project Complexity</b>	Preference is given to less complex projects over those that are more complete.		2.50
	2.50	Extremely Low	
	2.00	Low	
	1.50	Moderate	
	1.00	High	
	0.50	Extremely High	
<b>Total Risk/Complexity Points</b>			<b>5.00</b>
<b>Alignment with Secretariat/Constitutional Strategic Goals</b>	Self reported factor indicates the degree to which a project aligns with the Secretariat/Constitutional Office's	2 points for increased alignment	10.00
	2.00	Not Aligned/Unknown	
	4.00	Modest	

Criterion	Scoring Detail	Descriptor	Max Points
	6.00	Significant	
	7.00	Transformational for the Secretariat	
	10.00	Transformational Commonwealth wide	
<b>Secretariat Alignment Points</b>			<b>10.00</b>
<b>Alignment with Commonwealth Strategic Plan</b>	score 10 for alignment with the Commonwealth's Strategic Plan	Binary score	10.00
<b>Commonwealth Alignment Points</b>			<b>10.00</b>
<b>ITD Evaluation</b> <i>(points not currently awarded)</i>	ITD Evaluation of agency's track record and capacity to deliver project successfully	1 point for increased capability	5.00
	1.00	Limited Capacity	
	2.00	Somewhat Capable	
	3.00	Mostly Capable	
	4.00	Capable	
	5.00	Fully Capable	
<b>ITD Evaluation Points</b>			<b>5.00</b>
<b>Grand Total Maximum Points</b>			<b>60.00</b>
<b>"Extra Credit/Tie Breaker" Points</b>			
<b>Use MA Based Resources</b>	Self reported factor indicates a project is anticipates using MA based resources (5) or does not (0)	Binary score	5.00
<b>Promote other economic activities (e.g. Green Energy)</b>	Self reported factor indicates a project aligns with additional Commonwealth wide objectives (5) or not (0)	Binary score	5.00

The Task Force process itself followed these steps:

1. Asked Branches/Secretariats/Constitutional Offices and agencies to submit projects to be considered for funding from the Federal Act (Christmas week) via web-based survey tool. Data compiled into database.
2. Branches/Secretariats/Constitutional Offices or agencies scored their projects based on these criteria shown in the table above.
3. Task Force reviewed the results of this scoring and adjusted where necessary to align with all criteria.
4. With all projects now scored, the Task Force agreed to wait until for final definition of the priorities and/or constraints in the Federal Act to complete the effort.

## Appendix 2B: Job Estimates Summary and Methodology

### IT Projects

The following table summarizes the IT projects and their potential impact:

IT Projects			
Secretariat or Constitutional Office	Total Project Count	Total Cost / Federal Act Request	Potential for New External Jobs
Administration and Finance	42	296,758,226	595
Education	14	166,310,000	95
Energy and Environmental Affairs	37	78,885,000	285
Health and Human Services	31	101,981,028	338
Housing and Economic Development	12	2,351,000	17
Independent Offices and Commissions	5	6,500,000	25
Judiciary	11	11,076,434	9
Labor and Workforce Development	9	26,230,000	59
Massachusetts District Attorney Association	3	1,315,000	11
Office of the Comptroller	3	26,500,000	57
Public Safety	9	185,150,000	523
State Auditor	1	6,562,300	16
Transportation and Public Works	15	64,310,000	151
Treasurer and Receiver General	2	1,500,000	3
<b>TOTAL</b>	<b>194</b>	<b>975,428,988</b>	<b>2184</b>

Each project has a specific plan (captured in the IT Task Force database) that estimates contractor job requirements. Additional contractor jobs will be created through the establishment of an outsourced Federal Act Project Management Office (PMO) within ITD that will oversee project execution, monitoring and reporting across all initiatives.

In total, approximately 2,200 external jobs would be created as a result of the IT Project List if all projects were to be implemented. These jobs will cover roles from entry to high-level positions, including:

- Entry Level Positions
  - Developer
  - Web Developer
  - .NET Developer
  - Java Developer
  - Trainer
- Mid-Level Positions
  - Database Administrator

- Architect
- System Analyst
- Business Analyst
- Network/Telecommunications
- High-Level Positions
- Project Manager
- Program / Portfolio Managers

## eHealth Projects

The following table summarizes the eHealth projects and their potential impact:

eHealth Projects			
Project	Total Project Count	Total Cost / Federal Act Request	Potential for New External Jobs
Ambulatory Electronic Health Records (AEHR)	1	340,000,000	805
Computerized Physician Order Entry (CPOE)	1	125,000,000	275
Community Health Center EHRs (CHC)	1	13,000,000	32
State-level Health Information Exchange (S-HIE)	1	35,000,000	96
<b>TOTAL</b>	<b>4</b>	<b>513,000,000</b>	<b>1208</b>

Most of the eHealth projects will be staffed through contracts with implementing organizations. Therefore, most of the jobs created will be in the private sector.

In total, an estimated 1200 external jobs would be created if all of the projects were to be implemented. These jobs will cover roles from entry level jobs to high-level positions, such as:

- Entry Level Positions
  - Trainer
  - Business Analyst
  - Programmer
- Mid-Level Positions
  - Implementation Lead
  - Database Administrator
  - System Architect
- High-Level Positions
  - Project Manager

## **Appendix 2C: eHealth Projects Recommendations Details**

Healthcare is information intensive. In the U.S. in general, it is also very much paper-based and highly fragmented with well documented associated issues in terms of patient safety, quality of care, and costs. While the Commonwealth of Massachusetts is one of the most advanced States in both the deployment of electronic health records (EHRs) in its various care-delivery settings, and the deployment of health information exchanges (HIEs) across settings, it is far from having achieved ubiquitous EHR automation and information sharing.

The four eHealth projects identified below are designed to close the automation gaps within three critical care-delivery settings (individual physician practices, acute care hospitals, and community health centers) and to deploy a state-wide HIE:

### **1. Ambulatory Electronic Health Records (AEHR)**

This project is designed to deploy an AEHR in 13,000 individual physician practices (out of the estimated 14,000 physician practices that exist in the Commonwealth).

On average, only 15% of the individual physician practices have clinical information systems (with typically the larger practices being more automated and the solo practitioners [there are 4,000 of them in the Commonwealth] being far less so). Yet, also on average, 35 to 40% of all the care provided in a community takes place in these individual physician practices. The lack of automation means that these physicians cannot easily trend patient data; do not have the clinical decision support tools that could alert them of adverse drug-to-drug interactions; cannot be electronically reminded of best medical practices; etc.

AEHR systems include these alert and reminder features. They typically include productivity tools such as an electronic prescribing that allows orders to be renewed and communicated automatically to pharmacies. AEHRs also allow patient data to be exchanged among authorized care providers both within a practice and with external providers (and increasingly with patients themselves).

The two primary obstacles to the deployment of AEHR systems in individual physician practices have been costs and implementation/support issues. This project is intended to alleviate these two concerns by lowering the adoption costs (on average, physicians will only contribute 15% of their practice installation's total costs), and by selecting AEHR systems that would be deployed by implementation organizations (IOs) vetted and monitored by the MeHI/DOH. In addition, the AEHR systems will be proposed in an ASP (Application Service Provider) mode where the application is remotely operated and maintained by approved service organizations (SOs).



## 2. Computerized Physician Order Entry (CPOE)

This project is designed to deploy a CPOE system in the 63 acute care hospitals throughout the Commonwealth that still do not have one or one fully implemented.

Most hospitals have installed ancillary (laboratory, radiology, pharmacy, etc.) and order entry/results reporting (OE/RR) systems. Yet, most of these OE/RR systems are typically used by data entry clerks and nurses, with well documented patient safety issues. For instance, the greatest percentage of preventable adverse drug events (ADEs) occurs during physician ordering( ). Less than 5% of U.S. hospitals have CPOE, i.e., clinical systems designed to be directly used by the attending physicians so that they can access patient information real time at the point and time of decision making, and enter their own orders so that transcription errors are eliminated. They can also take advantage of a variety of built-in clinical decision support tools: e.g., alerts regarding a potential medication error (wrong dosage, allergic reaction, drug-to-drug interaction, etc.); alerts regarding the existence of test results to avoid duplicate ordering; best practice reminders; recommended switch to a generic drug; etc. CPOE systems also typically automated workflows, electronic physician documentation (using templates that increase the electronic capture of structured data), and an integrated medication administration-pharmacy application. They are designed to be used by physicians and therefore incorporate special user interface and performance requirements.

The two primary obstacles to the deployment of CPOE systems in acute care hospitals have been costs and adoption issues. CPOE implementation is a time-consuming and expensive undertaking requiring at least two years for most hospitals, with a price tag that is beyond the reach of many community hospitals (especially those in relatively poor communities). Achieving physician utilization is also a daunting challenge as CPOE changes the way in which physicians practice medicine on a day-to-day basis. This project is intended to alleviate these two concerns by lowering CPOE costs and selecting implementation organizations (IOs) that have a proven methodology and the resources to support these complex clinical transformation projects.

## 3. Community Health Center EHRs

This project is designed to deploy an EHR in the 12 Community Health Centers (CHCs) in the Commonwealth that still do not have one or one fully implemented. The project also includes deploying a central clinical data repository (CDR).

CHCs serve as the front line of the primary care system for the Commonwealth. They are typically designed to provide underserved populations with preventive care and chronic disease care management services, thereby alleviating the burden on hospitals' emergency departments. It is critical that these care-delivery settings be clinically automated to enhance patient safety and care quality, increase staff productivity, and allow patient information to be shared with the acute care hospitals. Functionally, these CHC EHR systems are very similar to the physician practices' AEHR systems mentioned earlier.

Because of the populations they served, CHCs also function as an "early warning system" of emerging trends in public health. To exploit this potential, an additional project component is the deployment of a central CHC-specific CDR which will provide timely outcome and gap reporting on preventive and chronic care programs, and quality measures and improvement reports for the management of public health programs and the individual centers.

The two primary obstacles to the deployment of CHC EHR systems have been costs and implementation issues. This project is intended to alleviate these two concerns by lowering the system costs and selecting EHR solutions that would be deployed by implementation organizations (IOs) vetted and monitored by MeHI/DOH. In addition, the central CDR implementation can deploy data mining and reporting tools cost-effectively and provide each CHC with shared resources to help address their analysis and reporting needs.

## 4. State-level Health Information Exchange (S-HIE)

The three prior projects are designed to enhance the clinical automation level of three major care- delivery channels: individual physician practices (where the biggest automation gap probably resides); acute care hospitals; and CHCs. In parallel with the general deployment of EHRs in these three care-delivery channels, this project is designed to deploy a state-level health information exchange (S-HIE) that will support the

secure sharing of patient information among them and the care-settings that already have EHRs. The project also includes the deployment of a state healthcare data warehouse that will aggregate and normalize de-identified patient data for the purpose of population management, bio-surveillance, and quality/outcome measurement.

HIEs support the electronic movement of health-related data according to an agreed upon set of interoperability standards, across non-affiliated organizations in a manner protecting privacy and security. HIEs are expected to yield a wide range of benefits: increased patient safety (for instance, by sharing a patient's allergy data and medication list among his/her care providers); increased care quality (as a provider has access to patient data across the whole continuum of care at the time of decision making); and reduced cost (as information sharing reduces duplicate testing and the number of ADEs, streamlines or eliminates administrative processes like the manual pulling of patient charts, etc.). In fact, the state-level HIE (S-HIE) is intended to be a "network of networks" both connecting C-HIEs and encouraging their development. The S-HIE also includes a state-wide clinical data warehouse (CDW) made of de-identified patient data and including clinical analytics for the purpose of population management, bio-surveillance, compliance reporting, and outcome/performance analysis.

The primary obstacle to the deployment of a S-HIE has been its initial deployment cost. This project is intended to finance the S-HIE for a finite amount of fund and a finite amount of time; with the expectation that the project will become financially self-sustainable after that initial investment period. Indirectly, the S-HIE project is expected to foster the development of C-HIEs in medical trading areas throughout the Commonwealth.

To a large extent, these four projects should be considered as one e-Health program, engaging both EHRs and HIEs within the same initiative. Though unusual, this approach is highly logical and can offer important advantages:

- For physicians to gain value from a C-HIE, certain conditions must be met that EHR deployment enables. Specifically, a large quantity of medical information needs to be collected in a standardized electronic format and made available through the HIE, so that identifying and obtaining clinical data becomes a practical part of an office visit. Only a broad set of EHR-enabled physicians, as part of a coordinated community-wide system will generate such a store of standard, electronic clinical data;
- The value of an EHR system increases greatly if it has the power to integrate –quickly, easily, accurately, and consistently at the point of care – data obtained through a HIE from other care-delivery settings; and
- A concerted implementation process for EHRs and HIEs will leverage their interdependent value, facilitate networking and interoperability, and promote the establishment of a functional, useful HIE.

### **The Powerful Vision of an Interoperable EHR**

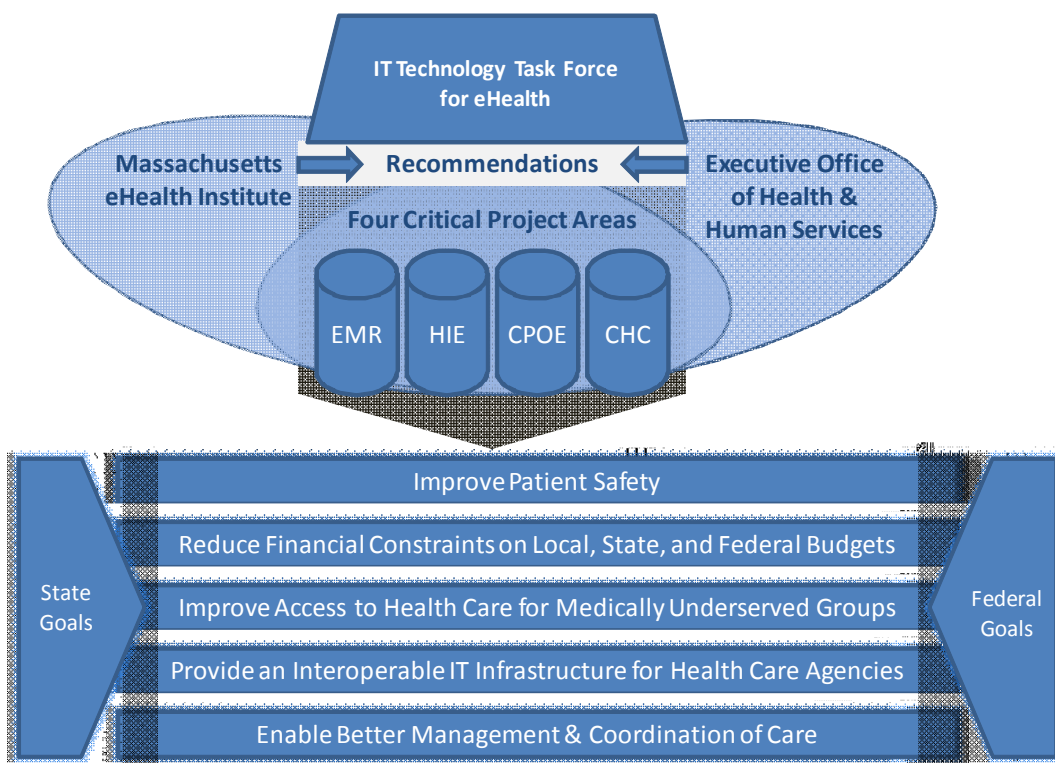
The value of the four eHealth projects recommended is both individual and synergistic. Synergistic means that the value of each project is increased by the others. For instance, the "value proposition" of an individual EHR is strongly increased when that EHR serves as a conduit for a provider to send and receive electronic information about a patient, and allow coordination of care across the continuum. Conversely, the automation of individual physician practices greatly increases the value of an HIE. The base EHRs also permit the accumulation of valuable clinical data for purposes of health assessment s and policy development, bio-surveillance, research, etc.

**Considered together, these four eHealth projects promote the concept of a state-wide interoperable EHR** is to provide integrated clinical information systems across the whole care continuum. The concept provides a powerful model which can potentially be applied across all care settings and will support all care professionals and disciplines. The interoperable EHR will be integral to delivering the medicine of the future in the Commonwealth. A future where care-delivery settings will be fully integrated across the whole care continuum and the patient will pass seamlessly through the system with controlled and managed 'hand-offs' with information flowing with the patient. A future where the expertise and skills of a wider range of clinicians will be used to deliver healthcare and where there will be much more emphasis on team working with

clinicians moving between different settings to deliver the care that is required, rather than asking the patient to travel as is now the case.

A future where the interoperable EHR will provide the foundation for integrated care and as a by-product will provide reliable and timely information for research and population management.

A future where patients will be better informed about their illness, their general health and well being, and about the services that are available to them. This will enable patients to make informed decisions about their own health and will support choice in how services are delivered and tailored to meet their individual needs. As a result the population as a whole will take more ownership and personal responsibility for their own health and, in turn, this will ensure more appropriate emphasis is placed on disease/illness prevention and health promotion rather than cure.



## Appendix 2D: eHealth – Potential Cost Savings

Potential Cost Savings		
Benefit Area	Description	Metric
<b>Communication &amp; Clinical Documentation</b>	Due to enhanced communication among care providers and enhanced clinical documentation mechanisms resulting from EMRs, health care delivery organizations, such as hospitals and community health centers would expect to see a decrease in partial shift overtime.	<p>The overtime that overlaps in a given shift allocated to documenting and transferring knowledge regarding patient(s) to the next staff member of the following work shift.</p> <ul style="list-style-type: none"> <li>Partial Shift Overtime.</li> </ul>
<b>Inpatient Throughput &amp; Capacity</b>	Resulting from automated work flow delivered by an EMR and greater ease of retrieving patient information through an HIE, more patients would be able to access services resulting in increased medical admissions, and a decrease in the average number of transfers pending each day.	<ul style="list-style-type: none"> <li>Number of Inpatient Medical Admissions.</li> <li>Average number of transfers pending each day.</li> </ul>
<b>Inpatient Length of Stay Reduction</b>	Length of Stay determines the number of days that a patient resides in an acute care setting following their admission; and Excess of Days per service area, such as hospital unit,	<ul style="list-style-type: none"> <li>Length of Stay.</li> <li>Excess of Days per service area.</li> </ul>
<b>Perioperative Services Throughput &amp; Capacity</b>	An automated workflow properly implemented has been proven to enhance throughput in perioperative environments conducting surgeries by increasing the number of OR cases per month, decrease OR Suite turnaround times, decrease the length of stay in the recovery room (PACU), and decrease room utilization.	<ul style="list-style-type: none"> <li>Number of OR Cases per month.</li> <li>OR Suite Turn-around Times.</li> <li>PACU Length of Stay.</li> <li>Room Utilization.</li> </ul>
<b>Emergency Department Throughput &amp; Capacity</b>	Immediate access to patient information and medical history through an HIE can facilitate care delivered in emergency situations, thus enabling greater access to care. This translates into increased number of ED visits, a decreased number of patients who leave without being seen, and a decrease in diversion time because an ER is able to see more patients. Also, with the automated EMR system and physician order system, the average length of stay in the ED would decrease due to greater efficiency in the process of delivering care.	<ul style="list-style-type: none"> <li>Number of ED Visits.</li> <li>Diversion Time, (length of time an ER diverts patients from other care providers, such as emergency medical response teams).</li> <li>Average Length of Stay in ED.</li> <li>Number of Left Without Being Seen (LWBS).</li> </ul>
<b>Pharmacy Utilization &amp; Supply</b>	The fusion of CPOE applications, tied to EMRs, and networked through an HIE can facilitate transfer of information and reduce redundant tests and orders based on availability of information for a given patient. Hence, the supply costs and pharmacy costs associated with procedures would decrease. In the process of automating workflow would enable a degree of supply and drug standardization at care organizations.	<ul style="list-style-type: none"> <li>Clinical Supply Costs.</li> <li>Pharmacy Costs.</li> <li>Supply &amp; Drug Standardization.</li> </ul>

## Appendix 2E: eHealth – Potential Cost Avoidance

Potential Cost Avoidance		
Benefit Area	Description	Metric
<b>Adverse Drug Events</b>	CPOE systems can be remarkably effective in reducing the rate of serious medication errors identified as “adverse drug events.” Both the number of cases and the rate of occurrence are important factors to monitor adoption as well as forecast a reduction in financial costs associated with adverse drug events.	<ul style="list-style-type: none"> <li>• Number of Adverse Drug Events.</li> <li>• Rate of Adverse Drug Events Occurring.</li> </ul>
<b>Duplicate Test Reduction</b>	As a result of disparate systems across health care organizations and presence of data integrity issues associated with the data, care providers order the same tests thus duplicating services rendered in the lab or for other diagnostic purposes.	<ul style="list-style-type: none"> <li>• Number of duplicate lab tests.</li> <li>• Number of duplicate radiology tests.</li> </ul>

## Appendix F: eHealth – System Performance

System Performance		
Benefit Area	Description	Metric
<b>System Uptime</b>	When the system is in a “steady state” the users can use and operate the system and applications in a normal manner. The system is not recovering from failures in its technology infrastructure or attempting to process work that was a result of a down state, (i.e. when the system was not available to the user), whether planned or unplanned, or conducting a history upload.	<ul style="list-style-type: none"> <li>• System Uptime.</li> </ul>
<b>Average Response Resolution&amp; Time</b>	Refers to the elapsed time for a user activity when using the System in a “steady state.” The Response Time measurement typically commences when the user completes an activity in the application itself, such as: (i) enters the last character in a field on a form and presses either the enter, return, tab, or similar end of activity action on the keyboard; or (ii) clicks on a confirmation to proceed indicator such as an OK, sign, confirm, done, or next dialogue box or icon. This measurement typically ends when: (i) the System is ready to accept the User’s next action such as the input of data; or (ii) the data requested by the user begins to display.	<ul style="list-style-type: none"> <li>• Time elapsed to complete a specific activity in the application.</li> </ul>
<b>Frequency of System Usage</b>	By measuring the number of transactions (orders, results, referrals, etc.) flowing through the exchange, the Task Force will be able to gauge the facilitation of information sharing.	<ul style="list-style-type: none"> <li>• Number of transactions flowing through the exchange utility.</li> </ul>

System Performance		
Benefit Area	Description	Metric
<b>Number of Users</b>	Having the vast majority of hospitals, physician practices, and other care provider organizations, such as labs, Imaging Centers, Pharmacies, etc. connected to the exchange utility means that data is being captured from multiple venues of care and creating a patient centric record across the entire continuum that is accessible to all care providers.	<ul style="list-style-type: none"> <li>• Number of users participating in the exchange utility by organization type.</li> <li>• Number of users allowed to access the exchange utility.</li> </ul>
<b>Accuracy of Master Patient Index/ Record Locator Service</b>	It is critical for use and adoption of an exchange utility to ensure that data coming into the system is standardized and is connected to the right patient.	<ul style="list-style-type: none"> <li>• Monitor accuracy of the utility's algorithms in retrieving the right patient data during a selected time frame.</li> </ul>

## Appendix 3: Private Development

Recognizing the many benefits that high-speed Internet service, or broadband, can bring across all sectors to the citizens of the Commonwealth, including universal Internet for school-age children, seamless access for first responders, improved healthcare outcomes and e-health interoperability, enhanced civic participation and more efficient government, Governor Patrick identified ubiquitous broadband as a key element of the Commonwealth's economic development strategy. Towards this end, in August 2008, Governor Patrick signed *An Act Establishing and Funding the Massachusetts Broadband Institute* with the purpose of bringing affordable broadband to those citizens in the Commonwealth currently without access and dedicating up to \$40 million in general-obligation bond funds for the purpose of bringing affordable, robust and ubiquitous broadband, through a public-private partnership model, to unserved and underserved citizens.

### The Public-Private Partnership Model

Unlike other more traditional and visible objects of public infrastructure investment, such as roads, bridges and school buildings, broadband is a new form of infrastructure that is materially different. Historically in the United States, broadband infrastructure has been financed, built and operated by the private sector. Unfortunately, unserved areas of the Commonwealth (mostly in rural western Massachusetts) have proven to be cost-prohibitive for telecommunications providers which have, in turn, prevented network expansion and deployment of broadband infrastructure to those areas. The required capital investment is too great, and the break-even timeline is too long. For example, detailed financial modeling suggests that a private provider would require roughly 30 years to break even on a capital investment in a rural area like western Massachusetts. Additionally, many of the public benefits of broadband do not flow directly to commercial Internet providers and are therefore (and understandably) not part of their business calculus – this is exactly where it is appropriate for targeted and careful government intervention.

Through the Broadband Institute's public-private partnership model, we are authorizing the use of state bond funds for investment in selected long-lived components of broadband infrastructure, such as conduit, fiber and wireless towers. These components will then be made available to private firms, who will use these publicly owned assets, in combination with their own privately owned infrastructure assets, to offset their cost of providing broadband service to previously unserved homes and businesses. This unique approach, and the planning that has already taken place as a result of the Commonwealth's broadband initiative, along with the tools already provided by the Legislature via the recently-enacted Broadband Act, sets Massachusetts apart from many other states across the nation. Due to the work and collaboration done to date by public and private stakeholders, Massachusetts is in an enviable position to more effectively leverage potential federal funding for broadband infrastructure deployment than many other states.

### Regarding the Massachusetts Highway Department's conduit deployment along Interstate 91 and Interstate 291

Adding these two cables into the broader backbone ring will create four sub-rings, ensuring robust, redundant, and survivable networks. The build will also include diverse entrances to the carrier-neutral facility at One Federal Street in Springfield and the state's new proposed Data Center. Approaching these projects in this fashion will realize a savings on time and money for both the Commonwealth and potential private providers looking to partner with us – and would have an immediate economic stimulus effect.

### Overall Economic Benefits

Complementary federal funding for broadband will ensure that Massachusetts is well-positioned to compete effectively within our 21<sup>st</sup> century, knowledge-based, information economy. Broadband access has a proven track record of stimulating economic growth, creating jobs, and increasing property values and tax receipts. Broadband also generates many public returns – including fewer cars on the road, better education and health care and more efficient government – that pay societal dividends above and beyond the profits reaped by the private firms that provide the service. Universal, affordable and consistently high-quality broadband would thus be the 21<sup>st</sup> century equivalent of previous federal government infrastructure initiatives, including the expansion of electricity, telephone and road networks, which resulted in tremendous short- and long-term economic development and increased shared prosperity from targeted public infrastructure investments.



## MassDevelopment Non-Profit Fund

### Higher Education Projects

Recent surveys of colleges and universities by MassDevelopment, HEFA, and AICUM reveal 67 shovel-ready construction projects totaling \$1.5 billion that are currently on hold. These projects represent 9,687 one-year FTE jobs. Eleven of these projects entail the construction of new academic facilities that will increase permanent employment by the institutions as well as allow them to increase enrollment. Eight projects entail the construction of new residence halls that would house more than 1,800 students, thus accommodating increased enrollment and relieving pressure on surrounding housing markets.

Private higher education in Massachusetts is a main economic driver by serving nearly 250,000 students, 112,000 of whom come from out of state. Massachusetts is the only state that educates more college students in the independent sector than in the public sector.

### Healthcare Projects

Thirty-four hospitals responded to a recent survey (about one-third of the state's hospitals) and identified 198 shovel-ready capital projects with a total cost of \$2.8 billion.

- 26 hospitals identified 77 building and renovation projects with a total capital requirement of \$1 billion.
- 21 hospitals identified 70 information technology projects with a total capital requirement of \$420 million.
- 16 hospitals identified 51 green/energy projects with a total capital requirement of \$1.3 billion.

	Number of Hospitals Reporting	Number of Projects	Total Capital Needs		Partial Funding Identified To Date
			Low Est.	High Est.	
Building/Renovations	26	77	\$ 1,017,324,021	\$ 1,026,361,021	\$ 400,533,000
Technology	21	70	\$ 418,674,519	\$ 422,674,519	\$ 30,613,545
Green/Energy	16	51	\$ 1,322,183,041	\$ 1,322,183,041	\$ 279,329,000
<b>Total</b>		<b>198</b>	<b>\$ 2,758,181,581</b>	<b>\$ 2,771,218,581</b>	<b>\$ 710,475,545</b>

MHA notes that many hospitals identified traditional brick-and-mortar projects involving replacement, renovation, or enlargement of critical building infrastructure to replace outdated, undersized, and ageing facilities. Some of these ageing facilities were built more than three decades ago and require upgrades to meet patient needs and to satisfy current safety and efficiency requirements. The median age of Massachusetts hospitals in 2006 was 11.4 years compared with 9.7 years nationally.

### Cultural Facilities Projects

The Massachusetts non-profit cultural economy employs 45,000 people and has a statewide economic impact in excess of \$3 billion. Cultural organizations rank as second highest in a survey of why people visit the Commonwealth, and tourist spending supports hotels and restaurants. Gateway cities such as Lowell, New Bedford, North Adams, and Pittsfield depend on cultural facilities as a key component of their economic development. A general decline in corporate and personal contributions to these facilities is expected over the course of the current recession. Given the overall economic impact of this segment and the magnitude of potential projects, this sector merits strong support.

A survey conducted by the Massachusetts Cultural Council last month indicates that 72 shovel-ready projects across the state have an aggregate project budget of \$682.9 million.



## Appendix 4: Procurement

### Appendix 4A: Current Procurement Requirements



#### The Commonwealth of Massachusetts Office of the Inspector General

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INSPECTOR GENERAL

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Dear Local Official:

The following charts were created by the Office of the Inspector General for local officials to use as a quick reference guide on public procurement procedures that must be followed pursuant to the Massachusetts General Laws. Your local rules may establish stricter or additional requirements that you must follow. Contact your chief procurement officer (CPO) or legal counsel for advice on your local rules and procurement procedures.

The charts highlight particular areas which may require compliance depending on the cost or the nature of your procurement. For example, the charts highlight, where applicable, the requirement for a ten-hour course in construction safety and health approved by the United States Occupational Safety and Health Administration (OSHA). Pursuant to M.G.L. c.30, §39S, any person submitting a bid for, or signing a contract to work on, a public building or public works project estimated to cost more than \$10,000, must certify under the pains and penalties of perjury that he or she is able to furnish labor in harmony with all other elements of labor employed in the work and that all employees employed on the worksite, or in work subject to the bid, have successfully completed at least ten hours of OSHA approved training. The charts are meant to provide a general overview of the principal public procurement statutes, and are not a substitute for the advice of legal counsel.

Any suggestions for the charts or questions concerning M.G.L. c.30B may be directed to this Office by calling 617.722.8838. Questions concerning M.G.L. c.149, M.G.L. c.30, §39M, and M.G.L. c.7 may be directed to the Office of the Attorney General by calling 617.727.2200 or your legal counsel.

Prevailing wage rate sheets may be requested online at <http://www.mass.gov/dos/pwrequest> or by calling the Division of Occupational Safety at 617.727.3492.

*Central Register* advertisements may be submitted online at <http://www.sec.state.ma.us/spr/sprinf/infocent.htm> to the Secretary of the Commonwealth. The submission deadline is 4:00 pm on Tuesday.

*Goods and Services Bulletin* advertisements may be submitted online at <http://www.sec.state.ma.us/sprpublicforms/GSSubmissionform.aspx> to the Secretary of the Commonwealth. The submission deadline is 4:00 pm on Wednesday.

Sincerely,

A handwritten signature in dark ink that reads "Gregory W. Sullivan".

Gregory W. Sullivan  
Inspector General

**M.G.L. c. 149****BUILDING CONSTRUCTION CONTRACTS**

Estimated Contract Amount	Under \$10,000	\$10,000 to \$24,999	\$25,000 to \$100,000	Over \$100,000	Over \$10,000,000
Procurement Procedure	Solicit three written price quotes.	Solicit written price quotes.	Sealed bids (using M.G.L. c.30, §39M procedure).	Sealed bids.	Solicit statements of qualifications.
Advertising Requirements	No.	Advertise once in the Central Register and post a notice on your jurisdiction's bulletin board for at least two weeks before bids are due. Posting on your website or Comm-PASS is optional.	Advertise once in the Central Register and newspaper at least two weeks before bids are due, and post on your jurisdiction's bulletin board or website for one week before bids are due.	Advertise once in the Central Register and newspaper at least two weeks before bids are due, and post on your jurisdiction's bulletin board or website for one week before bids are due.	Advertise the request for qualifications once in the Central Register, newspaper, and Comm-PASS at least two weeks before bids are due. <sup>11</sup>
DCAM Certification	No.	No.	No.	Required for general bidders and filed sub-bidders.	Required for general bidders and filed sub-bidders.
OSHA Training	No.	Yes.	Yes.	Yes.	Yes.
City/Town Prequalification	No.	No.	No.	Optional. <sup>12</sup>	Yes.
Filed Sub-bids	No.	No.	No.	Yes (\$20,000 and over).	Yes (\$20,000 and over).
Bid Deposit	No.	No.	5% of the value of the total bid.	5% of the value of the total bid, or sub-bid.	5% of the value of the total bid, or sub-bid.
Payment Bond	50%	50% payment	50% payment	100% payment	100% payment

<sup>11</sup> The advertising procedures listed pertain only to the request for qualifications. Within 14 days of the completion of the prequalification evaluation process, you are required to post a notice in your jurisdiction, and on Comm-PASS listing those general and sub-bidders who have been prequalified. A copy of the notice must be sent via first class mail, postage pre-paid to all prequalified general and sub-contractors along with an invitation to bid. The invitation to bid must have a deadline of at least two weeks. You may only solicit bids from those contractors that have been prequalified.

<sup>12</sup> If you decide to use the optional prequalification process for projects over \$100,000, follow the procedures listed in the "Over \$10,000,000" column.

	payment bond, if project cost is more than \$2,000.	bond.	bond.	bond.	bond.
Performance Bond	No.	No.	No.	100% performance bond.	100% performance bond.
Prevailing Wage	Yes.	Yes.	Yes.	Yes.	Yes.
Contractor Evaluation	No.	No.	No.	Yes.	Yes.

**M.G.L. c. 30, §39M****PUBLIC WORKS (NON-BUILDING) CONSTRUCTION**

Estimated Contract Amount	\$10,000 and under	Over \$10,000
Procurement Procedure	No.	Sealed bids.
Advertising Required	No.	Advertise once in the Central Register and your local newspaper at least two weeks before bids are due, and post a notice on your jurisdiction's bulletin board for one week before bids are due.
DCAM Certification	No.	No.
OSHA Training	No.	Yes.
City/Town Prequalification	No.	No.13
Filed Sub-bids	No.	No.
Bid Deposit	No.	5% of the value of the total bid.
Payment Bond	50% payment bond, if project cost is more than \$2,000.	50% payment bond.
Performance Bond	No.	No.
Prevailing Wage	Yes.	Yes.

**M.G.L. c.30B alternative procurement procedure referenced from M.G.L. c.30, §39M(d).****PUBLIC WORKS (NON-BUILDING) CONSTRUCTION**

Estimated Contract Amount	Over \$10,000 up to \$25,000
Procurement Procedure	Sealed bids.
Advertising Required	Advertise once in your local newspaper at least two weeks before bids are due, and post a notice on your jurisdiction's bulletin board for at least two weeks before bids are due. M.G.L. c.9, §20A requires an advertisement in the Central Register.

<sup>13</sup> Although M.G.L. c.30, §39M does not mandate a contractor prequalification process, prequalification of bidders by the Massachusetts Highway Department is required for contracts of \$50,000 or more where the awarding authority receives State Aid funds under M.G.L. c.90, §34, or the work is on a state road, regardless of whether the awarding authority receives State Aid funds under M.G.L. c.90, §34.

DCAM Certification	No.
OSHA Training	Yes.
City/Town Prequalification	No.
Filed Sub-Bids	No.
Bid Deposit	No.
Payment Bond	50% payment bond.
Performance Bond	No.
Prevailing Wage	Yes.

## M.G.L. c.7, §§38A½-O PUBLIC BUILDING PROJECTS DESIGN SERVICES

### Cities, Towns, Regional School Districts, and Horace Mann Charter Schools<sup>141516</sup>

Estimated Construction Cost Design Fee*	\$100,000 or less *	Over \$100,000*
Procurement Procedure	No. Recommend soliciting qualifications and prices from at least three designers.	Qualifications-based selection process. Jurisdiction must either set the design fee or set a not-to-exceed fee limit and negotiate the fee with the top-ranked designer within the fee limit.
Advertising Required	No.	Advertise once in the Central Register and your local newspaper at least two weeks before the deadline for filing applications.
Designer Selection Board	No.	Registration and application.

<sup>14</sup> Cities, Towns, School Districts, and Horace Mann Charter Schools are required to adopt their own procedures for selecting designers for building projects. These procedures must conform to the purposes and intent of the designer selection process as outlined in M.G.L. c.7, §§38A½-O and noted herein. See the *Model Designer Selection Procedures for Municipalities and Other Local Public Agencies* developed by this office at <http://www.mass.gov/ig/publ/dsbguide.htm>.

<sup>15</sup> Housing Authorities must follow the procedures established by the Department of Housing and Community Development for design of state-funded housing.

<sup>16</sup> Executive Departments of the Commonwealth and Commonwealth Charter Schools are subject to the jurisdiction of the Designer Selection Board when the design fee is \$10,000 or more and the construction project is estimated to cost \$100,000 or more.

Designer Evaluation (Submit to DCAM and Designer Selection Board)	No.	Yes.
Registration	No.	Yes, by Board of Registration in the appropriate discipline.
Insurance	No.	10% of the total cost of the project or \$1 million, whichever is less.
Prevailing Wage	No.	No.

**\* Design Fee:** The Designer Selection Board recommends that when there is no estimated cost of construction, the designer selection procedures should be followed if the design fee is \$10,000 or more. For practical purposes, the design fee should not exceed 10% of the estimated cost of construction.

### **M.G.L. c.30B Procurement of Supplies and Services**

Estimated Contract Amount	Under \$5,000	\$5,000 to \$24,999	\$25,000 and over
Procurement Procedure	Sound business practices. <sup>17</sup>	Solicit three written or oral quotes.	Sealed bids or proposals. (M.G.L. c.30B, §§5 or 6).
Advertising Required	No.	No.	Advertise once in a newspaper of general circulation at least two weeks before bids or proposals are due, and post a notice on your jurisdiction's bulletin board or website for two weeks before bids or proposals are due. If \$100,000 or more, advertise once in the Goods and Services Bulletin.
Award contract to:	Responsible <sup>18</sup> person offering a competitive price.	Responsible person offering the lowest price.	Under §5, the responsive <sup>19</sup> and responsible bidder offering the lowest price. Under §6, the most advantageous proposal from a responsive and responsible proposer taking into consideration price and evaluation criteria.

<sup>17</sup> This office interprets sound business practices to mean periodically checking price lists or seeking price quotes to ensure that you are receiving a competitive price for the supply or service.

<sup>18</sup> M.G.L. c.30B, §2 defines a responsible bidder or offeror as "a person who has the capability to perform fully the contract requirements, and the integrity and reliability which assures good faith performance."

<sup>19</sup> M.G.L. c.30B, §2 defines a responsive bidder or offeror as "a person who has submitted a bid or proposal which conforms in all respects to the invitation for bids or request for proposals."

Written Contract <sup>20</sup>	No.	Yes.	Yes.
Maximum Contract Term <sup>21</sup>	Three years, unless majority vote authorizes longer.	Three years, unless majority vote authorizes longer.	Three years, unless majority vote authorizes longer.

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<sup>20</sup> M.G.L. c.30B, §17(a) states “All contracts in the amount of [\$5,000] or more shall be in writing, and the governmental body shall make no payment for a supply or service rendered prior to the execution of such contract.”

<sup>21</sup> M.G.L. c.30B, §12(b) states “Unless authorized by majority vote, a procurement officer shall not award a contract for a term exceeding three years, including any renewal, extension, or option.”

## Appendix 4B: Procedures for Good Faith Efforts

### PROCEDURES FOR GOOD FAITH EFFORTS

#### Objective of Good Faith Efforts

Good faith efforts are those that, given all relevant circumstances, a bidder/offeror actively and aggressively seeking to meet a DBE goal would make. The bidder/offeror must show that it took all necessary and reasonable steps to achieve the DBE goal, which by their scope, intensity and appropriateness to the objective, could reasonably be expected to obtain sufficient DBE participation, even if they were not fully successful. Only those efforts made prior to the award stage will be considered for evaluation of good faith efforts.

To award a contract to a bidder/offeror that has failed to meet the DBE contract goal as stated in that specific solicitation, the MBTA would decide whether the contractor made “good faith efforts” to actively and aggressively seek DBEs to meet the established goal. In determining whether good faith efforts have been made, the MBTA will consider on the basis of documentation timely submitted, the quality, quantity and the intensity of the different types of efforts that the bidder/offeror has made.

#### Procedure/Steps

The MBTA considers each of the listed steps particularly significant in evaluating a bidder's good faith efforts. The kinds of efforts that are considered demonstrative of good faith efforts include, but are not limited to, the following:

1. **Pre-bid meetings/advertising/written notices.** A bidder's or offeror's failure to solicit through all reasonable and available means (e.g. pre-bid meetings, advertising and/or written notices) the interest of all certified DBEs who have the capability to perform the work of the contract, may be considered adversely by the MBTA in assessing good faith efforts. Advertisements and written notices should be placed in minority and/or women trade association's newspapers or other media that can reasonably be expected to reach DBE firms. The bidder/offeror must determine with certainty if the DBEs are interested by taking appropriate steps to follow up initial solicitations.
2. **Identifying portions of the work/Letters.** The contractor is expected to select portions of the work to be performed by the DBEs in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out work items units to facilitate DBE participation, even when the prime contractor might otherwise prefer to perform these work items with its own forces.

A bidder or offeror is expected to solicit sub-bids by mailing on a timely basis, registered or certified letters to DBE firms qualified to perform those categories of work which the bidder is willing to subcontract. The letter will clearly identify the portions of work and also offer to breakdown more portions that are economically feasible to facilitate DBE participation. The letter may also offer assistance with regard to bonding and insurance requirements, where applicable, and/or financing (e.g. lines of credit). Other assistance may include: contacting bonding and insurance companies of behalf of DBEs; arranging with sureties incremental or phased bonding for the DBEs; paying for the cost of the bond or insurance; and waiving bond or other requirements.

Bidders will use the Massachusetts Unified Certification Program (MUCP) known as SOMWBA as a source of DBEs for solicitation. In addition to this mandatory requirement to use the MUCP database, bidders are encouraged to use the services of minority and women community organizations in order to identify certifiable DBEs for work under the contract.



3. **Adequate information and follow-up by Primes Contractors.** Prime contractors/bidders/offerors are expected to provide DBEs with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation. Follow-up activity by the Prime must be documented by telephone logs or other written documentation which provide:

- Type of contact, e.g. telephone call, visit, letter.
- Name of person who made contact and name of person and firm contacted; telephone, and date of contact
- Response from the firm contacted

**Responses from interested DBEs.** Bidders will submit records of responses, proposals and/or bids received from DBEs, which will include:

- Names, addresses and telephone numbers of all DBEs that responded to the bidder's solicitation
- All responses, proposals, or bids received and whether these were in writing or verbal. If written, copies of such responses must be submitted
- The date each response was received.

4. **Negotiating in good faith.** It is imperative that the bidder negotiates in good faith with interested DBEs. A summary of all communications and negotiations between the bidder and the DBE should be documented by the bidder. It is the responsibility of the bidder/offeror to make a portion of the work available to the DBE subcontractors and suppliers and to select these portions of the work or material needs consistent with available DBE subcontractors and suppliers, so as to facilitate participation. Evidence of such negotiations includes: names; contact information of DBE considered; information regarding plans for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBEs to perform the work.

5. **Equipment/Supplies/Materials.** Contractors may make efforts to assist interested DBEs in obtaining necessary equipment, supplies, materials, or related assistance or services.

6. **Other Bidders.** Whether other bidders on the procurement met the DBE goal in itself is not determinative but may be instructive.

7. **Other Efforts.** Each bidder/offeror may include in the information submitted any other efforts made to meet the DBE goal that are not listed above.

## Appendix 4C: Streamlined Design Services Procurement Process

### STREAMLINING THE PROCESS FOR PROCUREMENT OF DESIGN SERVICES

**Objective:** Make the procurement process for study design services and final design services more efficient.

**Why is it needed:**

The process is currently too cumbersome in two areas:

1) Continuation Services

- currently DCAM and the DSB use a two step process in order to have a designer appointed to perform the continued services of final design where that firm already performed the study
- this process can be reduced to one step saving time and unnecessary work to accomplish the same goal
- experience shows that the firm selected for the study is almost always asked to continue on to perform final design services
- *note: G.L. c. 7, section 38I requires the DSB to approve continued or extended services (both defined) and the recommended course of action below will not affect that section 38I*

2) Study Certification

- currently the process of contracting with a designer to perform final design services on a building project is being delayed by the requirement that there be a completed certified study by the DCAM commissioner in place, before moving forward with encumbering funds, signing a contract and authorizing the designer to proceed
- where the certification of a study is a formality, significant time can be saved by allowing the final design to proceed upon completion of the basic elements of the study (to be determined by DCAM commissioner) and sign off by the user agency

**What is needed: \***

1) Continuation Services

Administrative Change

- DSB to combine procurement process of study and final design services by specifying in the study design advertisement, that when the DSB ranks and chooses the finalists for study design services, this also constitutes the DSB's approval of continuation to final design services unless the DCAM commissioner determines otherwise
- this will require a change to the statutory quorum requirements because the DSB will be acting on larger projects at the outset (see next bullets)

Proposed Legislation

- G.L. c. 7, section 38F (d) calls for three "classes" of projects differentiated by size and complexity and each class of project has a different quorum requirement for the DSB to act
- The separate classes of project are not necessary and section 38 (d) should be deleted
- The DSB should be bound by only one quorum requirement for simplification of the process
- Set the quorum for all project at six members - this will be a reduction from nine which was the quorum for the largest and most complex projects – but require that four of the six must be architects or engineers
- The Regulation at 811 CMR Section 4.01 and sequence, which addresses the "classes" of projects referenced in the above bullets must be repealed

2) Study Certification

- Administrative change – DCAM to determine earliest time possible to proceed with final design services for commissioner to authorize proceeding, i.e., minimal study components for schematic design that that should be included for User Agency, Programming Director and DCAM Commissioner Sign-off: DCAM confirmation of the need for the proposed project; Building Space Program with Adjacency Diagrams; Feasibility and constructability analysis; Proposed Scope of construction with alternatives considered; Implementation Schedule; Cost Estimate
- Legislation – In G.L. c. 29, section 7K eliminate the study certification formality requirement in item (d) of 7K, which requires that the DCAM commissioner certify in writing to the commissioner of administration that the study is complete and appropriate, and add a provision stating that the contract for design may be awarded upon satisfactory completion of the basic elements of the study, in the DCAM commissioner's discretion.

*\*Items affecting the DSB have been vetted through and are fully endorsed by the DSB*

## **Appendix 4D: Centralized Prequalification for Construction Manager at Risk Firms**

### **Statewide Centralized Prequalification for Construction Manager at Risk Firms**

**Existing Law:** Under GL c 149A, each awarding authority, on a project by project basis, undertakes its own time consuming, labor intensive, two phase procurement process to: 1) prequalify or reject firms seeking prequalification; and 2) seek both non-price and price proposals from those firms it prequalified. This proposal would centralize the first phase, the prequalification of the CMs on a non-project specific basis, with the Division of Capital Asset Management (DCAM).

**Proposed Legislation:** The proposed legislation would authorize DCAM to issue a statewide Request for Qualifications to prequalify firms for CM at Risk projects undertaken by various awarding authorities across the Commonwealth. Annually DCAM would initiate the statewide CM Request for Qualifications process, generally following the current requirements of GL c.149A, except that it would not be tied to any particular project or project schedule, and the scope of services would be broad to be later refined by the awarding authority at the RFP stage. DCAM would advertise the RFQ, require submission of materials consistent with existing law, apply the same criteria it currently uses consistent with existing law and firms would be required to have prior CM at Risk experience. The statewide list of prequalified firms would be valid for one year from its issue, with firms required to reapply on an annual basis.\* Only those firms appearing on the centralized statewide list of prequalified CMs would be able to submit proposals to individual awarding authorities as those awarding authorities undertake procurements for individual CM at Risk projects.

Awarding Authorities undertaking the CM at Risk Request for Proposals process could accept proposals from firms on the Statewide List of Prequalified CMs. At the RFP stage awarding authorities would generally follow the current RFP process, advertising the project and in the RFP identify project specific qualifications or experience, specifics of the project, and the scope of services. Valid DCAM Certification as well as an Update Statement would be required at both the RFQ and RFP stages and awarding authorities would select CMs utilizing the criteria consistent with the existing law, including similar project experience.

**Advantages:** Under the proposal there would be one statewide list of prequalified CMs for Massachusetts CM at Risk projects. It would relieve individual awarding authorities from having to undertake the repetitive and time consuming task of prequalification on a project by project basis and the relieve CM firms from having to submit voluminous and repetitive materials to each awarding authority on a project by project basis. At the six month point the statewide list could be opened up if new firms want to apply for addition to the list, and if deemed prequalified would be added to the list until the next annual statewide prequalification is undertaken by DCAM.

*\*DCAM does not believe grouping firms by type of projects or size of projects at the RFQ stage for developing the centralized statewide list is necessary and that one master list of prequalified firms is sufficient. Awarding Authorities will identify project specific prior experience requirements in the RFP, and at the RFP stage a firm's DCAM Certification, single project limit and aggregate project limit will serve to also ensure that they are not applying for projects which may exceed their prior experience or capacity.*

## Appendix 4E: Proposed “Condensed” Prequalification Process

### Proposed “Condensed” Prequalification Process For Vertical Construction Projects

The following is a proposal for a Condensed Prequalification Process for use during the Federal stimulus period. In making this proposal, significant consideration has been given to the required balance needed between the urgent economic priority of expediting “shovel-ready” projects in order to get both people and businesses in the Commonwealth back to work and the critical need to protect the public interests and maintain quality and accountability in the selection of contractors and subcontractors eligible to perform work on public construction projects.

This proposal does not eliminate the current prequalification process required in M.G.L. c. 149, §§ 44D½ and 44D¾ and 810 CMR 9.00 and 810 CMR 10.00 for projects with an estimated construction cost of \$10 million or more. Instead, this proposal is intended to provide awarding authorities with the OPTION to conduct an abbreviated process, in lieu of the current required process, providing certain requirements are met.

Highlights of the proposed Condensed Prequalification Process “option” created by this proposal are below:

1. Awarding authorities opting for the Condensed Prequalification Process shall be required to utilize a standard RFQ that includes specific requests for submission of information on all statutory criteria not otherwise included in the DCAM Certification review process. (see attached chart)
2. Awarding authorities opting for the Condensed Prequalification Process shall have an affirmative obligation to review the DCAM Certification files and must certify in writing that they have reviewed the DCAM Certification files for all current prequalification criteria identified as duplicative with the DCAM Certification review process. (see attached chart)
3. By requiring the prequalification committee for awarding authorities conducting the Condensed Prequalification Process to affirmatively review the DCAM Certification files and certify in writing that Prequalification Committee has taken that step, the proposed process provides the awarding authority with critical information regarding an interested general contractor or subcontractor’s public project record. In addition, a prequalification committee will have access to any new information that may have arisen since the most recent annual DCAM Certificate of Eligibility was issued, including information submitted by third parties or other public owners regarding any updates on contractor performance on public projects.
4. DCAM will revised its Update Statement form, required by contractors at both the prequalification and bidding stages of procurement, to now require the contractor to provide the required “updates” back to the date of its application for certification or re-certification rather than from the date of the last certificate issued. This is intended to fill a noted gap in reporting by contractors identified between the time a contractor applies for certification and when it has a certificate issued. By revising this reporting requirement, contractors will have to report information that may have occurred (i.e. fines, law suits, penalties, terminations, etc.) since submitting its application for DCAM certification.
5. DCAM will revise its Contractor Evaluation Form required pursuant to M.G.L. §44D(7) and §44D(16) to include additional “certification” language that requires awarding authorities and owner’s project managers preparing the required Contractor Evaluations to state the following:

*I hereby certify that this project evaluation was not the subject of any negotiation, close-out, or settlement of the subject project or related thereto and that no compensation or consideration (either financial or*

*additional work on this project or otherwise) was given to the awarding authority or me in connection with its preparation or the opinions contained herein.*

## **Appendix 4F: Energy Service Contracts – Solicitation from Three Prequalified Firms**

### **Energy Service Contracts – Solicitation from Three Prequalified Firms**

#### **Current Law:**

M.G.L. c. 25A, §11C authorizes the procurement of an energy services contract with one company that provides a combination of services including energy audits, design, financing, construction, and maintenance services. DCAM conducts the procurement process for these combined services by issuance of a publically advertised request for proposals (“RFP”) seeking proposals from DCAM Certified energy service companies (ESCOs). Currently, §11C requires DCAM to publically solicit proposals from all DCAM certified ESCOs.

In response to the RFP, ESCOs conduct a preliminary review of the designated facility and provide proposals to DCAM (and its client user agency) offering to perform certain energy conservation measures (lighting, cogen, boilers, etc) at the designated client facility. The RFP process often results in multiple proposals which can vary significantly on the type and scope of recommended energy conservation measures. Proposals are evaluated through a competitive process on the basis of cost, quality and energy savings. The proposal and evaluation process is complex and time consuming and, depending on the size and nature of the facility, it can take approximately 3 months to complete an analysis of the recommended measures and determine what proposal is in the best interest of the user agency. Contracts are then jointly executed by selected ESCO, DCAM, and respective user agency.

This RFP procurement process for energy service contracts is not subject to the Designer Selection Board or the procurement processes specified in M.G.L. c. 149 but governed by Chapter 25A.

#### **Proposal:**

This proposal is to amend M.G.L. c. 25A, §11C to allow DCAM the option to establish a prequalification process that would allow DCAM to create a prequalified list of ESCOs to work on public projects in the Commonwealth (which includes DCAM and all public agencies). In addition, this proposal requires further amendment to M.G.L. c. 25A, §11C to allow DCAM and its user agencies to issue the RFP to a minimum of 3 prequalified ESCOs rather than the universe of DCAM certified and qualified ESCOs, providing the awarding authority certify that the selection of ESCOs from which proposals solicited was made in a fair and equitable manner without influence or negotiation with any ESCO. Specifically, it would allow DCAM to streamline the current RFP, proposal, evaluation and selection process by issuance of an annual RFQ intended to prequalify ESCOs. This would be as an alternative to the current requirement to seek proposals from all DCAM certified ESCOs for a particular project. By limiting the pool of ESCOs to 3 firms, DCAM and the user agency can reduce the time required to review and evaluate the energy conservation measures offered in the proposals.

The process of prequalifying approved ESCOs and inviting only a limited number of ESCOs to submit proposals through an RFP process is not a novel concept. It is being utilized at Federal facilities and several states and is endorsed by the Energy Services Coalition, which is a national nonprofit organization composed of a network of experts from a wide range of organizations working together at the state and local level to increase energy efficiency and building upgrades through energy savings performance contracting.

#### **Advantages:**

The advantage of this proposal would be to streamline the selection process for qualified ESCOs and expedite the installation and implementation of energy and cost savings measures. It would also result in higher quality proposals from ESCOs because ESCOs would know that only a limited number of firms have been asked to participate in the proposal process for each facility. This would also reduce costs associated with the RFP and proposal process which currently requires DCAM and its user agencies to dedicate resources to review multiple proposals (which have various engineering and technical

components) from multiple ESCOs and determine the best fit for facility. It would further reduce costs for ESCOs currently spending the time and money to prepare proposals where the chances are limited for selection. The proposal evaluation process and selection could be shortened and more focused.

## Appendix 5: State Facilities and Courts

### Division of Capital Asset Management (DCAM)

#### DCAM STAFFING PROJECTIONS

#### FEDERAL ECONOMIC RECOVERY INFRASTRUCTURE FUNDING

January 12, 2009

Variable Planning Assumptions	
Fed Funding Amount (\$Millions)	\$ 300.0
Percent Large Capital Projects	50%
Percent Smaller Repairs	15%
Percent Energy Projects	35%
Avg Cost Large Projects (\$Millions)	\$ 25.0
Avg Cost Small Projects	\$ 700,000
% Small Projects Managed by DCAM	60%
% New FTEs Available Through Outside Prog Mngrs (OPDC)	50%
% New FTEs Available Through Outside Prog Mngrs (Energy)	50%

Office of Planning Design and Construction Includes All DCAM Managed Projects	
Project Managers Needed	7
Asst Project Mngrs Needed	14
Deputy Directors Needed	2
Admin Project Coordinators	2
Prog Project Managers	2
Prog Planning Assts	2
OPDC Admin Support	2
<b>TOTAL OPDC FTEs</b>	<b>30</b>

Energy and Facilities Maintenance Assume All Energy Projects DCAM Managed	
Energy Retrofit Planners	4
Efficiency Maximization Planners	2
Contract Specialists	3
OFM Repair Managers for Hs Dr. Prog	2
Job Order Contracting Coordinator	1
Energy and Maint Data Coordinator	2
Commissioning Coordinator	2
<b>TOTAL FTEs E/OFM</b>	<b>16</b>

Critical Support Staff - All Other DCAM Offices	
Finance Contracting/Bid Room Admin *	2
Finance - Accountant *	1
Agency Wide Database Manager *	1
Bid Room Additional Manager	1
Attorney - Energy and Construction *	1
Real Estate/Leasing Support for OPDC *	1
* variable based on amount of fed \$	
<b>TOTAL Critical Support FTEs</b>	<b>7</b>

TOTAL FTE PROJECTION ALL DCAM	
OPDC	30
E/OFM	16
OTHER OFFICES	7
<b>TOTAL ALL AGENCY FTEs</b>	<b>53</b>

REVISED DCAM FTEs - TAKING OUTSIDE PROGRAM MNGRS INTO ACCOUNT	
OPDC	15
E/OFM	8
OTHER OFFICES	7
<b>TOTAL ALL AGENCY FTEs Factoring In Outside Prog Mngr Firms</b>	<b>30</b>
<b>AGENCY FTEs That Could Be Replaced By Outside Prog Mngr Firms</b>	<b>23</b>



## Department of Housing and Community Development (DHCD)

DHCD Bureau of Housing Development and Construction	Current (FTE) Staffing including hiring to fill existing positions FY 09 \$104M Baseline Cap	Additional Hiring	Additional Hiring	Additional Hiring	Additional Hiring	Additional Hiring
		Required to :  Accelerate Current Capital P Expand current scopes and add Energy Saving Components	Required to :  Add Strategic Sustaina	Required to :  Add Delegated Capital Projects, new code and life/safety projects and	Required to :  Add Comprehensive Mod	Required to :  Provide support and assistance to DHCD staff for all additional
Preliminary Proposed Staffing Projections						
In Support of The Federal Economic Recovery Program						
January 9, 2009		\$311.8 m and 263 Projects over Baseline For FY10	Next \$36.4 m and 219 projects over Baseline For FY10	Next \$156.3 m and 866 projects over Baseline For FY10	Next \$73.5 M and 19 Projects over Baseline For FY10	For FY10
<b>Senior Management</b>						
Director, BHDC	1					
Asst. Director for Operations	1					
Capital Finance Manager	1					
Director, Program Development	1					
Director, Project Management	1					
Technical Services Director	1					
<b>Subtotals</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Project Management</b>						
Asst. Director Project Management	1					
Supervising Project Manager	1	1		1		
Senior Project Managers	10	2		3	1	
<b>Subtotals</b>	<b>12</b>	<b>3</b>	<b>0</b>	<b>4</b>	<b>1</b>	<b>0</b>
<b>Architectural and Engineering</b>						
Supervising Architect	1					
Supervising Engineer	1					
Staff Architect	6	1			1	
Mechanical Engineer	3	1			1	
Civil Engineer	1			1		
<b>Subtotals</b>	<b>12</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>0</b>
<b>Construction Administration</b>						
Supervisor of Construction Services	1					
Senior Construction Advisor	1					
Construction Advisors	5	1		2	1	
<b>Subtotals</b>	<b>7</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>0</b>
<b>Program Development</b>						
Developer, Mixed Finance Programs	1					
Developer, Sustainability Programs	1					
Capital Planning System Developer	1					
Sustainability Project Assistant			1			
Energy Specialist			1			
<b>Subtotals</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>CRITICAL SUPPORT FUNCTIONS</b>						
Senior Accountant	1					2
Contract Specialist (legal staff)	0					1
Accountant	1					2
Fiscal Analyst	1					2
Senior Clerk	1					
Admin. Serv.	1					
Clerk	1					2
Clerk	1					1
<b>Subtotals</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10</b>
<b>INCREMENTAL TOTALS - ALL BHDC</b>	<b>47</b>	<b>6</b>	<b>2</b>	<b>7</b>	<b>4</b>	<b>10</b>
<b>CUMULATIVE TOTALS - ALL BHDC</b>	<b>47</b>	<b>53</b>	<b>55</b>	<b>62</b>	<b>66</b>	<b>76</b>
Net new						29

**Department of Conservation and Recreation (DCR)**

	25 % funding	50% funding	75% funding	100 % funding
<b>Res. Eng's</b>	11	22	33	44.5
<b>Project Mgr's</b>	2.5	5	7	10
<b>Admin Support</b>	1 (project tracking)	2	2	2
<b>TOTAL</b>	<b>14.5</b>	<b>29</b>	<b>42</b>	<b>57.5</b>

**Massachusetts Convention Center Authority (MCCA)**

firm	Tishman Construction Corp. of MA	MCCA Staffing	Owner's Proj. Mgr. Staffing
<b>Boston Common Garage - Entry / Exit Roadway Restoration</b>			
<b>SOC</b>	<b>Design and Construction Management</b>		
47-1010	Project Executive		0.25
47-1010	Project Manager	Existing Staff	0.5
47-1010	Project Assistant Manager		
43-9199	Administrative Assistant		0.25
13-2031	Project Finance Administrator	Existing Staff	0.25
47-1010	Project Field Inspector		1
<b>SOC</b>	<b>OPM Subcontract Construction Personnel</b>		
23-1011	Construction Law Attorney		0.25
17-0000	Field Test Inspector		0.25
47-1010	Project Scheduler		0.25
47-1010	Project Field Inspector		
13-1051	Project Estimator		
<b>Subtotals</b>		<b>0</b>	<b>3</b>
<b>Mass Mutual Center Arena Roof Replacement</b>			
<b>SOC</b>	<b>Design and Construction Management</b>		
47-1010	Project Executive		0.25
47-1010	Project Manager	Existing Staff	0.5
47-1010	Project Assistant Manager		
43-9199	Administrative Assistant		0.25
13-2031	Project Finance Administrator	Existing Staff	0.25
47-1010	Project Field Inspector		1
<b>SOC</b>	<b>OPM Subcontract Construction Personnel</b>		
23-1011	Construction Law Attorney		1
17-0000	Field Test Inspector		0.25
47-1010	Project Scheduler		0.25
47-1010	Project Field Inspector		
13-1051	Project Estimator		
<b>Subtotals</b>		<b>0</b>	<b>3.75</b>
<b>Hynes / MTA Tunnel Concrete Ceiling Replacement</b>			
<b>SOC</b>	<b>Design and Construction Management</b>		
47-1010	Project Executive		0.25
47-1010	Project Manager	Existing Staff	0.5
47-1010	Project Assistant Manager		1
43-9199	Administrative Assistant		0.25
13-2031	Project Finance Administrator	Existing Staff	0.25
47-1010	Project Field Inspector		2
<b>SOC</b>	<b>OPM Subcontract Construction Personnel</b>		
23-1011	Construction Law Attorney		0.25
17-0000	Field Test Inspector		0.5
47-1010	Project Scheduler		0.25
47-1010	Project Field Inspector		
13-1051	Project Estimator		
<b>Subtotals</b>		<b>0</b>	<b>5.25</b>
<b>Hynes Asbestos Flooring Abatement &amp; Replacement</b>			
<b>SOC</b>	<b>Design and Construction Management</b>		
47-1010	Project Executive		0.25
47-1010	Project Manager	Existing Staff	0.5
47-1010	Project Assistant Manager		0.5
43-9199	Administrative Assistant		0.25
13-2031	Project Finance Administrator	Existing Staff	0.25
47-1010	Project Field Inspector		1
<b>SOC</b>	<b>OPM Subcontract Construction Personnel</b>		
23-1011	Construction Law Attorney		0.25
17-0000	Field Test Inspector		0.5
47-1010	Project Scheduler		0.25
47-1010	Project Field Inspector		
13-1051	Project Estimator		
<b>Subtotals</b>		<b>0</b>	<b>3.75</b>
<b>Totals</b>		<b>0</b>	<b>15.75</b>

Firms	Simpson, Gumpertz, and Heger, & Keville	Engineering Staff
<b>Boston Common Garage - Entry / Exit Roadway Restoration</b>		
<b>SOC</b>	<b>Prime and Subconsultant Engineers &amp; Designers</b>	
17-1011	Principle	1
17-1011	Senior Project Mgr B & C	1
17-2050	Staff Consultant 1-A & 1-B	1
17-2050	Senior Staff II-A	
17-2199	Structural Eng	1
17-3011	Senior Drafter	1
17-3022	Staff1-B	
17-2080	Environmental Engineer	
17-3022	Senior Project Supervisor A	
17-3029	Senior Lab Technician	1
17-3029	Non-Technical A Support	
13-1051	Estimator	1
<b>Subtotal</b>		<b>7</b>
<b>Mass Mutual Center Arena Roof Replacement</b>		
Firms	Simpson, Gumpertz, and Heger, & Keville	
<b>SOC</b>	<b>Prime and Subconsultant Engineers &amp; Designers</b>	
17-1011	Principle	1
17-1011	Senior Project Mgr B & C	1
17-2050	Staff Consultant 1-A & 1-B	2
17-2050	Senior Staff II-A	
17-2199	Structural Eng	1
17-3011	Senior Drafter	1
17-3022	Staff1-B	1
17-2080	Environmental Engineer	
17-3022	Senior Project Supervisor A	
17-3029	Senior Lab Technician	
17-3029	Non-Technical A Support	
13-1051	Estimator	1
<b>Subtotal</b>		<b>8</b>
<b>Hynes / MTA Tunnel Concrete Ceiling Replacement</b>		
Firms	Simpson, Gumpertz, and Heger, RW Sullivan, & Keville	
<b>SOC</b>	<b>Prime and Subconsultant Engineers &amp; Designers</b>	
17-1011	Principle	2
17-1011	Senior Project Mgr B & C	2
17-2050	Staff Consultant 1-A & 1-B	1
17-2050	Senior Staff II-A	2
17-2199	Structural Eng	1
17-3011	Senior Drafter	1
17-3022	Staff1-B	1
17-2080	Environmental Engineer	
17-3022	Senior Project Supervisor A	1
17-3029	Senior Lab Technician	
17-3029	Non-Technical A Support	1
13-1051	Estimator	1
<b>Subtotal</b>		<b>13</b>
<b>Hynes Asbestos Flooring Abatement &amp; Replacement</b>		
Firms	Simpson, Gumpertz, and Heger, Tetrattech Rizzo, & Keville	
<b>SOC</b>	<b>Prime and Subconsultant Engineers &amp; Designers</b>	
17-1011	Principle	2
17-1011	Senior Project Mgr B & C	2
17-2050	Staff Consultant 1-A & 1-B	1
17-2050	Senior Staff II-A	
17-2199	Structural Eng	
17-3011	Senior Drafter	2
17-3022	Staff1-B	
17-2080	Environmental Engineer	1
17-3022	Senior Project Supervisor A	
17-3029	Senior Lab Technician	1
17-3029	Non-Technical A Support	
13-1051	Estimator	1
<b>Subtotal</b>		<b>10</b>
<b>Total</b>		<b>38</b>

**Administrative Office of the Courts**

	<b>Responsibilities</b>	<b>Projects &gt; \$1M</b>	<b>Projects &lt; \$1M</b>
<b>AOTC</b>			
Contract Attorney	Administer the contracting process / study design Construction, etc. Coordinate the operation of bid room.	1	
Engineer	Manage technical aspects of projects through the various phases of study-design-construction; work with DCAM, House Doctors		1
Project Manager	Provide onsite project supervision; reporting prevailing wage compliance		1
Administrative Coordinator	Process / maintain required documents, contracts, fiscal, accounting		2
<b>Court Capital Projects</b>			
Project Administrators	Work in conjunction with DCAM to administer all aspects of projects; Coordinate with AOTC departments to provide information;		
Architect (MA Registration)	Manage design aspects of projects through the various phases of study-design-construction. Responsible for Federal reporting requirements.	1	
Engineer (Preferably Electrical)	Manage technical aspects of projects through the various phases of study-design-construction. Responsible for Federal reporting requirements.	1	
Administrative / Procurement Coordinators	Process / maintain required documents, contracts, fiscal, accounting	0	
Engineering / Architectural Interns	Support projects through CAD work and to coordinate construction documents.	2	

## Appendix 6: Workforce

The following questions and answers were compiled after discussions with members across various Task Forces. This information provides a summary of the key thoughts emerging in each of the areas discussed above.

### School Building Upgrades

Question	Response
<b><i>If Federal Act money becomes available for this industry what will be your initial/short-term workforce needs?</i></b>	Primarily building trades workers: plumbers and gasfitters, electricians, carpenters, masons, roofers. Also, steelworkers, heavy equipment operators, refrigeration and boiler technicians, truck drivers, laborers.
<b><i>Is there a ready supply of workers or are there specific areas in which you anticipate shortages?</i></b>	There are a significant number of unemployed skilled trades workers (masters and journeymen). However, there might be a need for additional apprentices and laborers, as well as additional graduates from vocational technical and proprietary training programs.
<b><i>Kinds of occupations and skills needed, including certification and licenses?</i></b>	Many of the occupations are licensed (electricians, plumbers and gas fitters, pipefitters, refrigeration and boiler technicians, heavy equipment operators, truck drivers)
<b><i>Are there existing training vendors who you hire from or use to upgrade skills?</i></b>	If projects require union contractors, the labor source is union hiring halls and the unions provide training. If projects do not require union contractors, the labor sources are varied (local relationships, advertisements) and the training system varies from vocational technical schools to proprietary training schools to OJT.

### Broadband Access

Question	Response
<b><i>If Federal Act money becomes available for this industry what will be your initial/short-term workforce needs?</i></b>	Primarily telecommunications, or data network installers, including line installers. Will also require sub-contractor supplied construction workers engaged in laying cables or lines underground or above ground; and/or wireless towers.
<b><i>Is there a ready supply of workers or are there specific areas in which you anticipate shortages?</i></b>	There are a significant number of unemployed construction workers available.

Question	Response
<b><i>Kinds of occupations and skills needed, including certification and licenses?</i></b>	Regarding telecommunications installers, including line installers, there were 1450 fewer workers employed in 2007 (8850) compared to 2001 (10,300). While they may not be unemployed, they may be willing to come back into the industry. It is possible that any workers coming into the industry will require to be trained on the current and specific technologies being used.
<b><i>Are there existing training vendors who you hire from or use to upgrade skills?</i></b>	Communications Workers of America and the International Brotherhood of Electrical Workers (IBEW) have apprenticeship programs and also joint programs at community colleges. E.g., A consortium of twenty-three colleges in Northeastern states an A.A.S. Telecommunications Technology degree program for Verizon technicians. Titled Next Step, the degree program was developed in partnership with Verizon and its Technical Unions; CWA (Communications Workers of America) and IBEW (International Brotherhood of Electrical Workers). Utilities Workers Union is starting a training program in Hyde Park and is a partner in a program at Bunker Hill CC in partnership with NSTAR. Traditional companies with an AT&T heritage, such as Verizon are union shops, many competing companies are non-union.

### Energy Efficiency

Questions	Responses
<b><i>If Federal Act.money becomes available for this industry what will be your initial/short-term workforce needs?</i></b>	Very difficult to determine prior to some kind of estimation of scope of work, number of sites, type of sites. But can move quickly to develop a tight estimate as stimulus information is available.
<b><i>Is there a ready supply of workers or are there specific areas in which you anticipate shortages?</i></b>	There may a good supply of workers available, although many will need skill upgrades. Weatherization of buildings to bring them up to EE standards has some specific skill sets attached to it (such as "air blower door testing" and use of an infrared camera to determine where heat leaks are) that are specialized to this work. Some additional workers will also be needed, but we cannot yet quantify how many.
<b><i>Kinds of occupations and skills needed, including certification and licenses?</i></b>	General Contractors – General Laborers Construction Equip Operators Roofers – Siding – Windows and door installation -Painters Insulation Workers  Demolition and renovation experts Electricians HVAC - Plumbing Industrial Truck Drivers Construction Managers PV Installation Energy auditors/job estimators

Questions	Responses
	Building Inspectors Architects Engineers
<b><i>Are there existing training vendors who you hire from or use to upgrade skills?</i></b>	Cape Cod Community College and Greenfield Community College; potentially the “Clean Energy Institute” being developed by CSG; most workers in these areas are trained by unions or employers through OJT. There are also a number of vocational technical schools with evening programs on energy efficiency.

Electronic Medical Records

Question	Response
<b><i>If Federal Act money becomes available for this industry what will be your initial/short-term workforce needs?</i></b>	<p>Health Care Information System vendors would need programmers, sales and technical support staff, and trainers</p> <p>Health care providers would need programmers (for conversion, IT staff for updates on software, trainers for new and ongoing staff training needs</p> <p>Many <u>acute care hospitals</u> have already implemented Electronic Medical Records (EMRs). Their needs are in ongoing training for current staff in utilizing EMRs, IT Help Desk staff to assist in use of software, and programmers/software developers to add enhancements and address changes in EMRs for increased efficiency and usefulness as well as use EMRs for management information purposes.</p>
<b><i>Is there a ready supply of workers or are there specific areas in which you anticipate shortages?</i></b>	<p>Programmers for design, enhancement and records conversion. There doesn't seem to be a lack of programmers now, but there might be some retraining needs depending on the system. Same for trainers and “help desk” staff.</p> <p>On an ongoing basis, clinicians, assistants and administrative staff will enter data, so no need for new staff. Where physicians utilize voice recognition transcription services, may utilize “correctionists” for editing. No articulated tremendous need for new staff.</p>
<b><i>Kinds of occupations and skills needed, including certification and licenses?</i></b>	Health care providers need trainers to teach staff how to use EMR, help desk staff for software usage, IT staff for ongoing development /system changes to address utilization of software. For programmers and IT staff, may be a need for training in specific systems and languages but no licenses/certifications identified. Providers also need staff to develop and implement legal protocols for usage of EMRs with respect to HIPAA and other legal and internal policy considerations. Staff with ongoing responsibility for using EMRs need the following competencies: “indexing” (or naming)

Question	Response
	<p>the document, and quality control of data entered, basic computer skills, keyboard and data entry, typing, encrypting and sending records to other providers.</p> <p>Health Care Information System Vendors need programmers/software engineers (generally college-level educated), sales staff (look for relevant work experience and/or bachelor's level education), trainers (same preparation as sales staff), and technical support staff (usually with experience in software and hardware support).</p>
<b><i>Are there existing training vendors who you hire from or use to upgrade skills?</i></b>	Vendors generally hire programmers who have relevant work experience and then train them in the specific application. Same for sales, support and training staff.

The Division of Occupational Safety (DOS) administers the law referenced in the Workforce section of this document, and detailed further below (G.L. c. 149, §§ 26 and 27, *et. Seq.*):

The infrastructure projects (building and transportation projects) associated with the Federal Act will all be subject to the Massachusetts prevailing wage law. The Division of Occupational Safety (DOS) administers that law (G.L. c. 149, §§ 26 and 27, *et. Seq.*), with relevant portions shown below:

*Prior to awarding a contract for the construction of public works, said public official or public body shall submit to the commissioner a list of the jobs . . . and shall request the commissioner to determine the rate of wages to be paid on each job. . . . The Commissioner . . . shall proceed forthwith to determine the same, and shall furnish said official or public body with a schedule of such rate or rates of wages as soon as said determination shall have been made. In advertising or calling for bids for said works, the awarding official or public body shall incorporate said schedule in the advertisement or call for bids by an appropriate reference thereto, and shall furnish a copy of said schedule, without cost, to any person requesting the same. Said schedule shall be made a part of the contract for said works and shall continue to be the minimum rate or rates of wages for said employees during the life of the contract. G.L. c. 147, § 27*

<sup>1</sup> United States Small Business Administration, [www.census.gov/epcd/www/smallbus.html](http://www.census.gov/epcd/www/smallbus.html) from Janneke Ratcliffe, Center for Community Capitalism, University of North Carolina at Chapel Hill, "Who Counting? Measuring Social Outcomes from Targeted Private Equity." Small Business Lending Survey, 2007 Spending Estimates, Tower Group